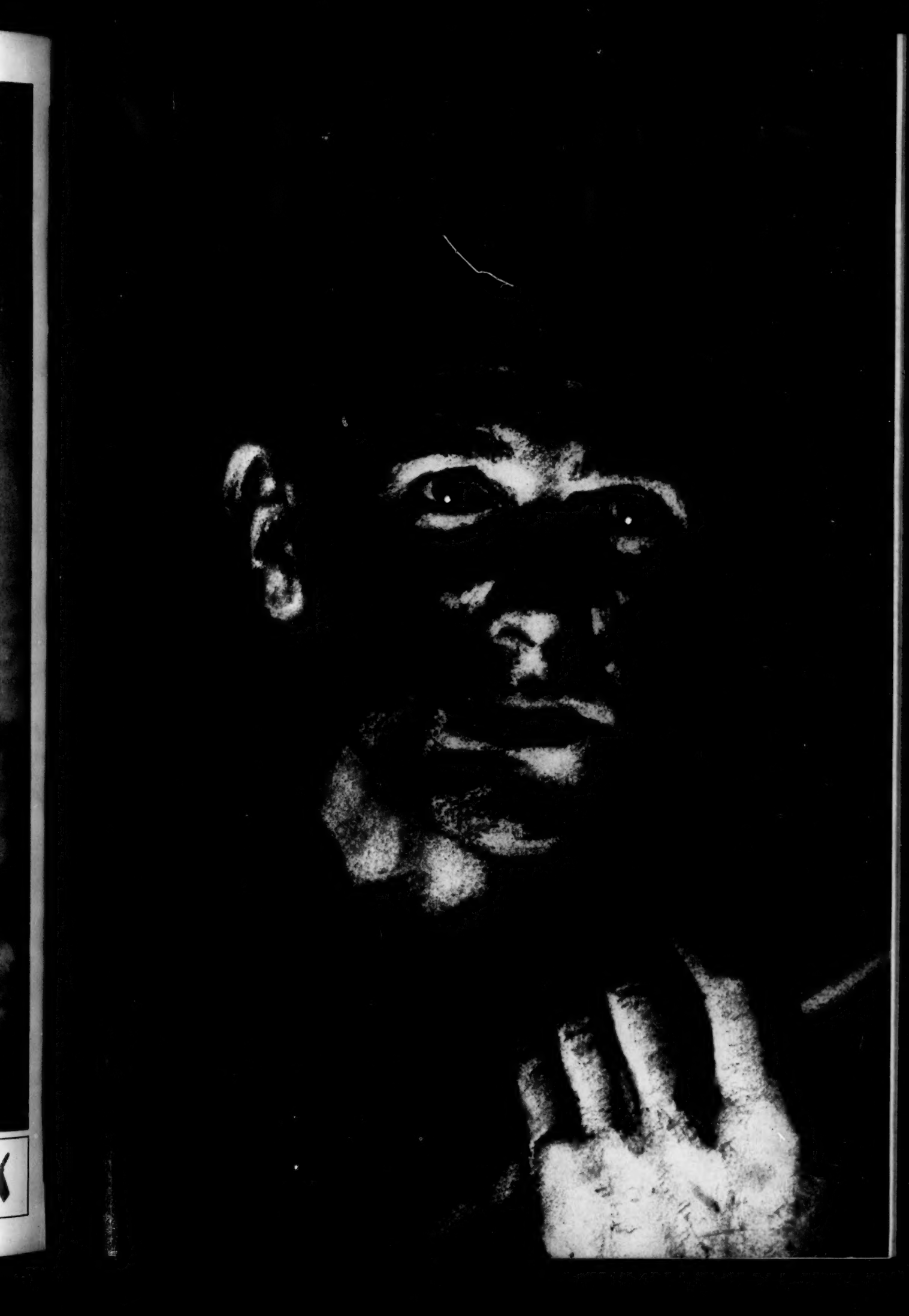

Marine Corps Gazette

SEPTEMBER 1953
NUMBER 9
VOLUME 37

A PROFESSIONAL MAGAZINE FOR UNITED STATES MARINES

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COVER

The Marine sweating out a night raid in Korea probably didn't know or care that about 50 years ago poet Francis Bourdillon wrote "The night has a thousand eyes," but we will lay odds that he subscribed to the feeling. The cover is from an original charcoal drawing by Sergeant Roy Thompson. Our back cover is a reproduction of an award received recently by the Gazette. It should speak for itself.

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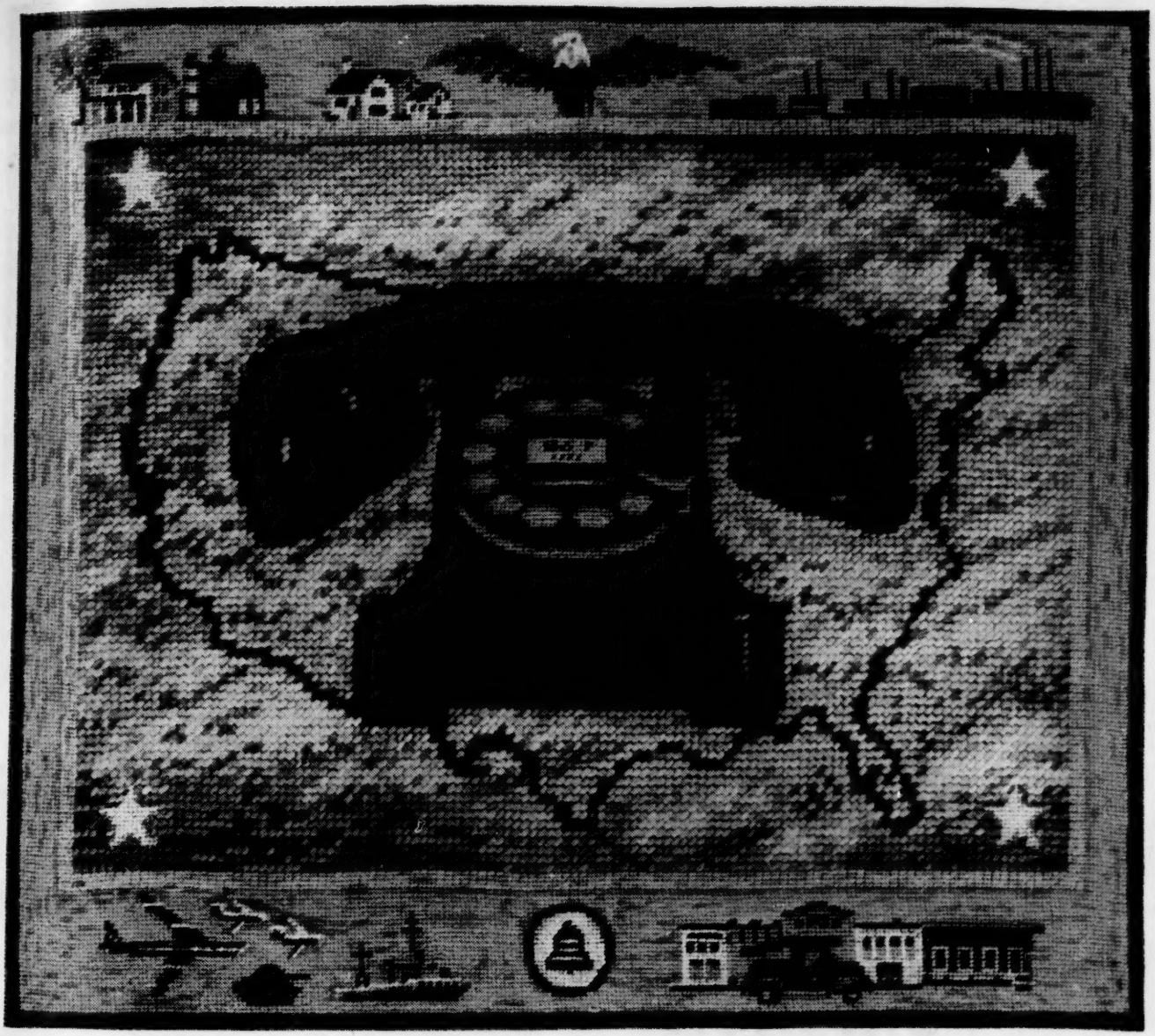

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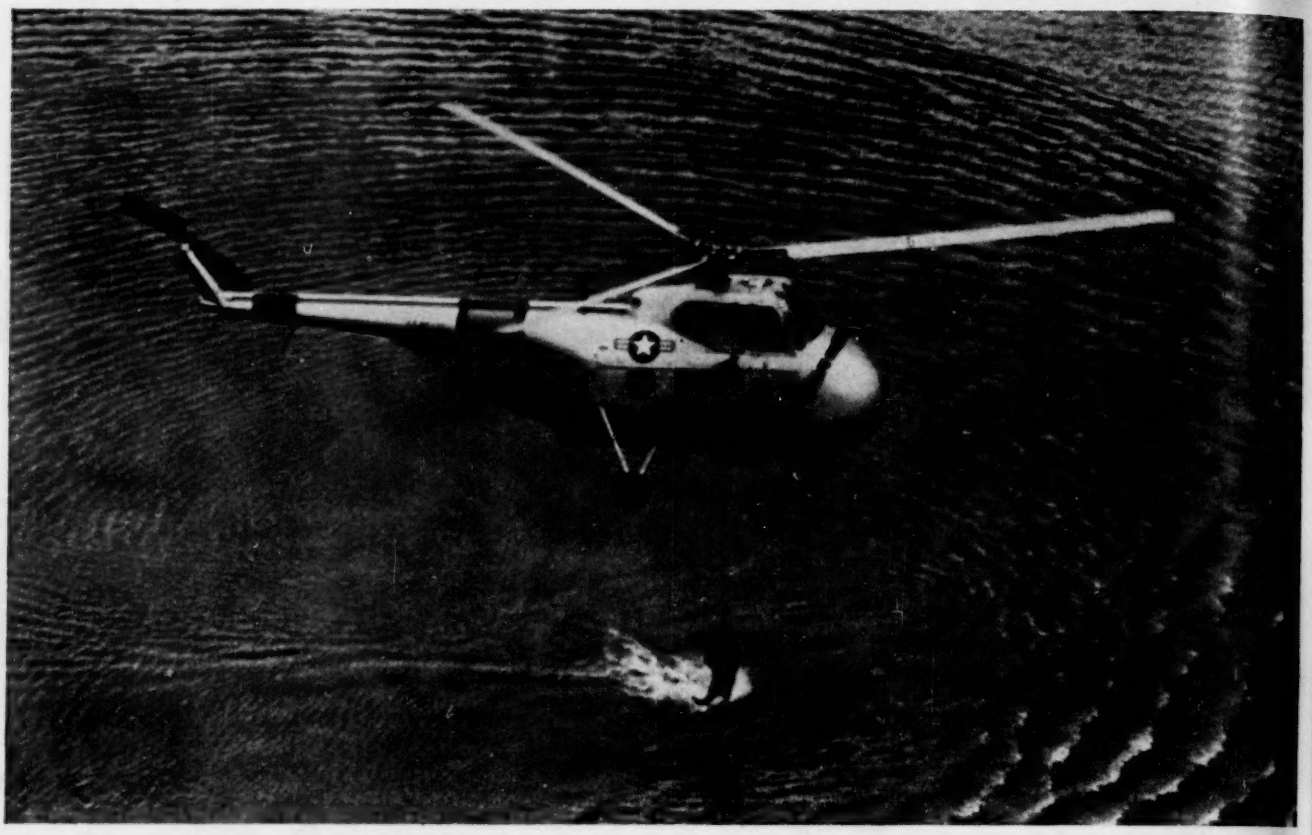

LIFE SAVER—Only a few minutes after bailing out of his crippled jet fighter, this Air Force pilot was rescued from the Yellow Sea off Korea by a Sikorsky H-19 helicopter. Such "Guardian Angels" hover just out of enemy range, ready to answer emergency calls. The rescue technique shown is responsible for saving hundreds of U. N. pilots.

AROUND THE WORLD WITH SIKORSKY HELICOPTERS

PRISONER EXCHANGE—During the exchange of sick and wounded war prisoners in Korea, Sikorsky H-19 helicopters of the Army's 6th Transportation Helicopter Company flew a steady shuttle between the exchange point near Munsan and hospitals in Seoul. Six patients were carried on each flight during the week-long operation.

INTERNATIONAL SERVICE—Sabena Belgian Airlines in August opened the first scheduled international helicopter passenger service, supplementing its regular airline service to all of Europe, the Near East and Africa. Using big Sikorsky S-55s, helicopter flights will serve cities in Belgium, Holland, France, Germany and Luxemburg.

FAST SERVICE—With Sikorsky S-55 helicopters, the first regularly scheduled U. S. helicopter passenger service has been opened by New York Airways. In July, regular passenger flights began between LaGuardia, New York International, and Newark Airports in the New York City area. Only minutes are needed for inter-airport trips, which once took hours by surface vehicle.

SIKORSKY AIRCRAFT

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message center

New Utilities

Dear Sir:

Just saw the new dungaree uniform in the July GAZETTE. It's good, except for the Army-style bloused trousers. . . . I would like to cast a vote for leggings. . . .

A too-short leg on an ill-fitting pair of replacement utilities tends to pull out of a tall person's boots, while leggings would keep the trousers secured. Also, leggings don't tear as easily as trousers in rough country.

. . . One point against leggings is that when the instep strap breaks the legging must be surveyed. Remedy this by putting a small D-ring where the strap is now sewed to the legging and use easily replaced blanket roll straps by drawing the strap through the D-ring until the strap buckle catches. Then buckle the strap in the usual manner on the other side. . . .

WARREN I. PAUL
Sergeant, USMC

Jacksonville, Fla.

Cover-up

Dear Sir:

. . . In your description of the July back cover you state that the men in the photo are "newly commissioned Basic School students." This is not correct. The troops were members of B Co, 7th Officer Candidate Class, 4th Training Bn, Basic School in their eighth week of training.

JAMES B. SOPER
Captain, USMC

Quantico, Va.

Right City, Wrong Troops

Dear Sir:

I noted an error in the July issue. You mention that, following the presentation of General Butler's sword to the Marine Corps Commandant, General Lemuel C. Shepherd, Jr., the "troops of Marine Barracks, Headquarters Marine Corps marched in a special sunset parade." The troops were from the Marine Barracks, 8th and Eye Streets, S. E., Washington, D. C. and not from Headquarters.

Also, for the information of those interested, a dress sunset parade is held every Friday evening at the Marine Barracks, 8th & Eye at about 1735 (weather permitting), and it is open to the public. It is really a colorful and inspiring spectacle and every Marine who has an opportunity should see one of these parades. He will go away a prouder Marine.

FLOYD M. MCCURDY
Captain, USMC

Washington, D. C.

Turnabout

Dear Sir:

. . . It wasn't the color of the utility uniforms on the June cover but rather the carriage of the Marines' weapons that struck me as being odd. . . .

ROBERT A. FOYLE
Captain, USMC

San Diego, Calif.

Dear Sir:

. . . After an all-night barracks discussion we decided to write for help. Just by coincidence, are all those Marines left-handed or has the Marine Corps devised a better way to carry a rifle?

RAYMOND H. PFARR
Corporal, USMC

Hawthorne, Nev.

Dear Sir:

As regards your June cover, the reversed positions of the canteens, first aid packets and bayonets on the packs would seem to indicate that the color transparency was reproduced backwards. Also, the fact that the muzzles of the rifles are pointing to the right would seem to verify this. I am curious to know if this was necessitated by the reproduction methods which you utilize or was merely an error. . . .

ALVIN K. DORN
2dLt, USMC

Quantico, Va.

Dear Sir:

. . . We could be wrong, but does the Marine Corps have a squad composed of all left-handed men? . . .

LAWRENCE D. TANKSLEY
TSgt, USMC
CHARLES C. MCCORKEL
SSgt, USMC
BILLY G. BONNER
Sergeant, USMC

Columbia, S. C.

ED: *This wasn't the case of a left-handed squad but of a southpaw editor. The photo was "flopped" somewhere along the line.*

Colors

Dear Sir:

. . . When does one begin and end his salute when "Colors" sounds? Look around and you will find almost everyone saluting for "Attention" and "Carry On." I maintain that this is wrong, but cannot find anything in writing about it.

DONALD S. MCCLELLAN
Captain, USMC

Korea

ED: *You are correct. Paragraph 2106, United States Navy Regulations*

Each month the GAZETTE pays five dollars for each letter printed. These pages are intended for comments and corrections on past articles and as a discussion center for pet theories, battle lessons, training expedients and what have you. Correspondents are asked to keep their communications limited to 200 words or less. Signatures will be withheld if requested; however the GAZETTE requires that the name and address of the sender accompany the letter as an evidence of good faith.

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states, "[Persons] shall come to the salute at the first note of the anthem, and shall remain at the salute until the last note of the anthem."

Saddle Up

Dear Sir:

In answer to the many recent letters concerned with packs, packboards, etc., I would like to inform interested parties that the Marine Corps is not ignoring this problem so important to the Marine.

There is currently under study at the Marine Corps Equipment Board a project entitled "Man Load Carrying Equipment." This study will deal . . . with *all* items of individual equipment carried by the Marine in combat, each being studied as to the feasibility of modifying, combining or eliminating so as to reduce the load carried by the individual without reducing his combat efficiency. . . .

The problem involves much more than one man's personal preference. Physiological factors must be studied; prototypes must be fabricated and tested; considerations must be given to the cost of new items as well as to the amounts still in stock of the item that is to be replaced.

. . . We appreciate the interest evidenced throughout the Marine Corps and are always open to any pertinent suggestions. We sincerely hope to come up with something which will satisfy all hands. Unfortunately, it takes time.

LESTER M. STONE, JR.
1stLt, USMC

Quantico, Va.

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Mystery No Longer

Dear Sir:

. . . I regret that I cannot furnish copies of the 1917 volume as mentioned in the April issue, but I did find a copy in the Yale library. I find that the article on voodooism did not appear. . . . According to the Union List of Serials, there are also copies of the 1917 volume in 10 other libraries.

JAMES E. MORROW
1stLt, USMCR

New Haven, Conn.

ED: *The mystery of the* GAZETTE'S *table of contents for the 1917 volume has thus been cleared. Now we are wondering what did happen to that manuscript on voodooism in Haiti.*

Grandson Speaks

Dear Sir:

I was keenly interested in Captain J. R. Johnson's account of *Morgan's Men* in the June GAZETTE since the brigadier of the Partisan Rangers, Adam R. Johnson, was my great-grandfather.

As a footnote, General Johnson ultimately became a leading Texas citizen. He lost both eyes and was captured in an obscure battle in Tennessee but returned to Texas after his release and settled on the frontier.

His blindness never got the better of him and he survived Indian difficulties and reconstruction political battles, becoming a successful rancher and industrialist and raising a large family. A town he founded in the '70s, Marble Falls, is still known as "the blind man's town." He died at the age of 89 after publishing his memoirs, *The Partisan Rangers*. . . .

GEORGE CHRISTIAN

Austin, Texas

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Current Year & State Registration____ Age of Youngest Driver in your Household____

Is Car Used for Business Purposes Other Than to and from Work? Yes____ No____

Name & Rank____

Military Address____

If Car not at above address, give location of car____

Selling the Amphibian

Dear Sir:

With reference to LtCol Croizat's fine article on *The Marine Amphibian*, there are some minor items which should be corrected.

First, I do not know how many people were impressed with the possibilities of the "Alligator" when it was first described in *Life*, and therefore claim authorship of the idea of adapting it for Marine Corps use, but as far as I am concerned it was Brig Gen Frederick L. Bradman, USMC, then President of the Equipment Board. It was General Bradman who had me ordered home from maneuvers in the West Indies via Clearwater, Florida to see the Alligator in March, not September, of 1938.

Second, the Alligator was fully operational at that time, and I brought back with me about 400 feet of 16mm film to show whoever was interested. This was Roebling's first model. This one was later modified, and it was the second one that I saw in 1939.

Acquisition for the Marine Corps was not a simple matter. Scanning the possible future battle areas . . . most Marines who had given the matter any serious thought felt that an amphibian of some sort was definitely indicated. . . .

With the Navy, on the other hand, it was not so easy. Boats of any kind were the Navy's province; they supplied the funds out of their appropriations, and money was not so easy to come by in 1938 and 1939. At that time they were definitely committed to a maximum five-ton lift for transports—and were quite hard-nosed about it, too! Fortunately, Roebling had been very liberal in the use of aluminum throughout so the weight was well under the limit. Thus the first obstacle was taken care of for us. Nobody dared mention armor at that time although we were thinking about it. . . .

The problem then became one of creating consumer demand. . . . If you have a device which you think is the thing to win a war, you had better take it around to the boys who are expected to use it, and if they think it is any good they will sell it for you. . . .

JOHN KALUF
Colonel, USMC (Ret)

Washington, D. C.

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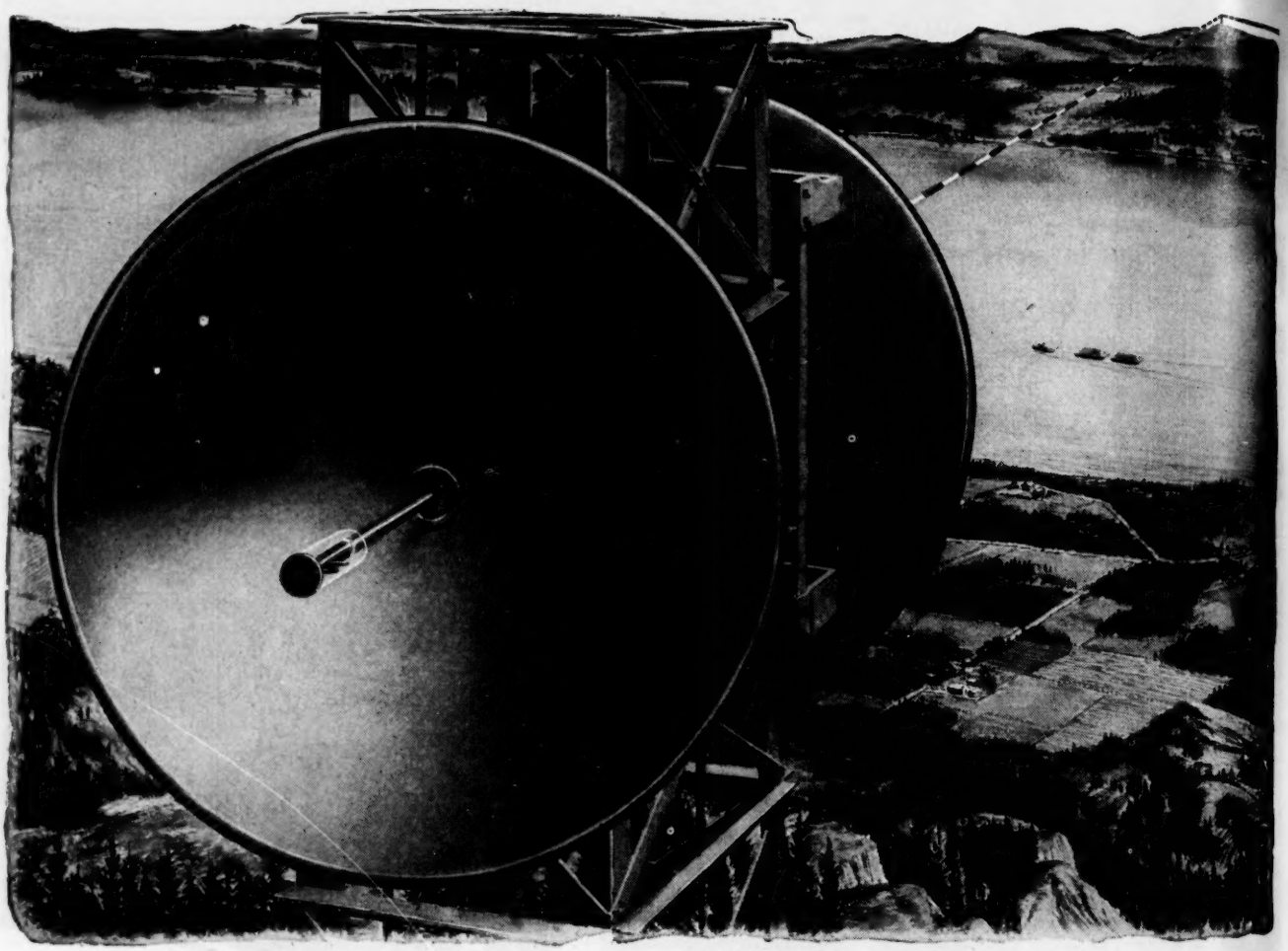
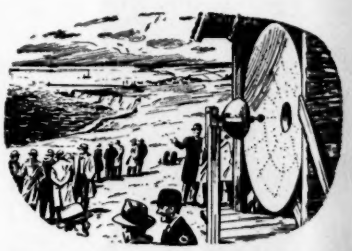


What every industrial executive should know about

MICROWAVE

In 1931, International Telephone and Telegraph Corporation became the world pioneer—the *first* to beam man's voice through space by microwave. Today microwave has become the fastest growing communications system for spanning mountains, swamps, rivers and other natural barriers without costly wire lines—a system that is virtually immune to storm damage.

And today IT&T is still the recognized leader, with its greatly advanced "pulse time multiplex" method of microwave transmission. If your company is planning to set up, expand or replace its own cross-country communication system, look first to PTM microwave. This versatile, flexible, new method provides for multiple speech channels, unattended telegraph, telemetering, remote control and other signaling. PTM microwave is available through *Federal Telephone and Radio Company*, a Division of IT&T.



IT&T engineers successfully demonstrate first voice transmission by microwave, Calais to Dover, March 31, 1931.

INTERNATIONAL TEL AND TEL

IT&T

INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION, 67 Broad Street, New York

For information on microwave communication systems, address: *Federal Telephone and Radio Company*, 100 Kingsland Road, Clifton, N. J.

Your authors

Maj James R. Stockman wrote *From Rotsy to Marine* (page 56) from the vantage point of his position as the Marine officer instructor at the University of Nebraska's NROTC unit. Before beginning this assignment, he was managing editor of the GAZETTE for two years. Thus he writes with the experience of knowing both his subject, NROTC students, and his readers, the GAZETTE subscribers.

MAJ STOCKMAN

A graduate of Central Missouri State College and the Junior School at Quantico, Major Stockman served with the 2d and 6th Marine Divisions during World War II and won the Silver Star on Saipan and the Bronze Star on Okinawa. He is the author of the World War II monograph, *Battle for Tarawa*.

All through World War II, **LtCol Barnette Robinson** sought combat duty, but not until late 1952, with the Korean war in its third year, did he succeed. In *First Mission* (page 12), Colonel Robinson describes just how he felt on that initial combat flight.

A tragic undertone to his dramatic story is the fact that, later in his Korean tour, the colonel was killed on a combat mission. While he was flying alone over enemy territory, his engine failed and he glided toward friendly territory. He parachuted, but he had lost too much altitude before bailing out.

LTCOL ROBINSON

At the time of his death, Colonel Robinson was executive officer of MAG-12. As a lasting memorial, the men of his unit have named the new ball field at K-6 airstrip in Korea, Robinson Field.

A graduate of the University of Arkansas and Junior School, MCS, the colonel had previously served as an instructor, commanding officer of a glider squadron and in various capacities with other squadrons and groups. His overseas time included two Pacific tours late in World War II, but no actual combat missions prior to his service in Korea.

Familiar by-lines are spread throughout this issue, and from **LtCol Harry W. Edwards**, a frequent contributor, comes *Netherlands Korps Mariniers*. Colonel Edwards came into the Marine Corps from the University of Minnesota in 1941 and served throughout the Guadalcanal and Bougainville campaigns prior to a tour of embassy duty in London. He was an instructor at TTUPac and I&I of the 14th Infantry Bn at Houston, Texas before serving as assistant G-3 of the 1st Mar Div and CO of the 1st Shore Party Bn in Korea. Colonel Edwards is now head of the Historical Branch, G-3, HQMC.

LTCOL EDWARDS

Major Dennis D. Nicholson, Jr. tells of the planning, execution and lessons of a night raid (page 28) in his fourth GAZETTE article.

After a tour as an enlisted man, Major Nicholson was commissioned in 1942. Since that time he has served as CO of the Marine detachment in the USS *Monterey*, in the Enlisted Performance Division of Headquarters Marine Corps, as public information officer of two recruiting divisions and as S-3 of the 3d Bn, 7th Marines in Korea. He is a graduate of the Junior School at MCS.

MAJ NICHOLSON

Major Nicholson is now secretary of the Marine Corps Development Center at Quantico.

A prolific author is **Major Reginald Hargreaves**, M.C. (British Service), who wrote *Know Your Enemy* (page 40). Veteran of line and general staff service in France and at Gallipoli during World War I, he was retired on medical grounds after being severely wounded in 1917. However, he returned to uniform during World War II.

MAJ HARGREAVES

In addition to his articles on military and social history and military comment, Major Hargreaves has authored a number of books.

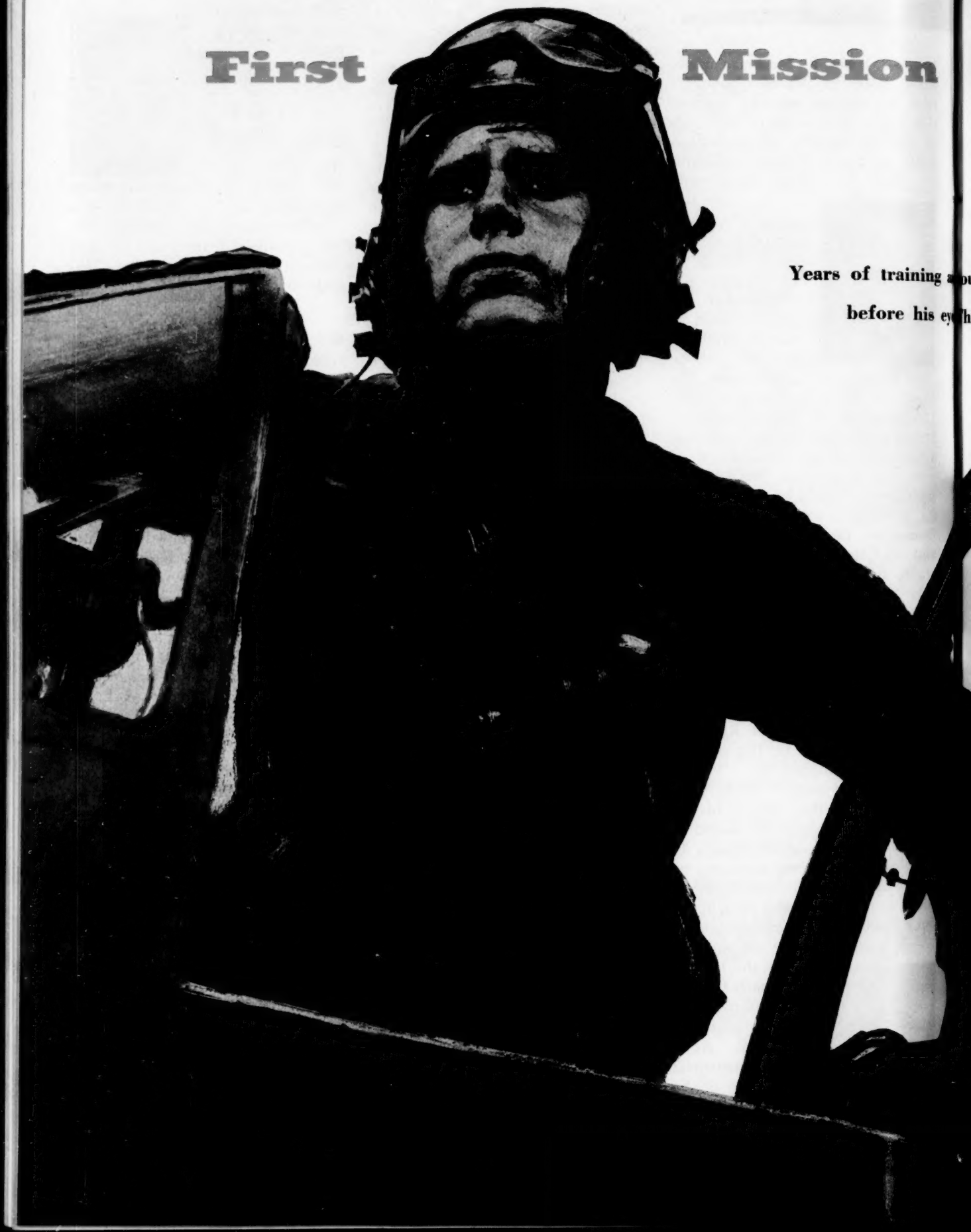
Annesta R. Gardner, a former Woman Marine officer, took a break from her duties as technical editor of *Dun's Review and Modern Industry*, to write *You're Moving the World* (page 36). Miss Gardner had engineering training at City College of New York and received bachelor's and master's degrees from the University of Chicago. During her brief tour as a Marine officer in World War II, she was stationed at Memphis Naval Training Station and at Cherry Point.

MISS GARDNER

LtCol Richard J. Ofstad has contributed *Look Behind the Grievance* (page 53). A graduate of San Jose (Calif.) State College, he was commissioned in 1939 and won his wings in 1941. Assignments in the Caribbean, Pacific and China followed. Colonel Ofstad was stationed at Cherry Point from 1949 to 1951 before attending the Graduate School of Personnel Administration and Training at Ohio State University. Also a graduate of the Command and Staff School at MCS, he is now a management analyst at HQMC.

LTCOL OFSTAD

First Mission



Years of training a
before his ey

By LtCol Barnette Robinson

ILLUSTRATED BY PFC TONY KOKINOS

ining a outine flights flashed

his ey hen the Corsair began its dive

"BUTTERBALL FLIGHT, GO PRIMARY.

I reached the radio and shifted the switch to my primary channel. Then I heard our division leader transmitting again, but now he was talking to a ground station.

"Pipestem, this is Butterball dash One, inbound with all my assigned chicks."

Pipestem was the controlling ground station for the area where we were going to drop our load of general-purpose bombs. The flight leader was 2dLt Jess Travers, 26 years old, with pale blue eyes and close-cut hair the color of a clay bank—Jess Travers, calm as a summer sunrise, who had brought back three Corsairs riddled with enemy bullets and who had come to know the landmarks along the bomb line like a cab driver knows the streets of his town. His wingman was a captain, Johnny Day. The second section was led by Major Bob Threlkell, and I was flying the fourth plane.

In a fighter division, the lead is not assigned by rank. Of the four of us, Jess had the most experience in the area, so he was leader. Bob Threlkell had a good start on his Korean tour of duty, and Johnny Day and I were the neophytes going on the first mission of our Korean tour of duty.

SO HERE we were, tooling along two miles above the earth headed for enemy territory. This was the nearest I had ever been to any national enemy. Sixteen years ago, fresh out of college into a jobless, depression-ridden world, I was glad for the opportunity to learn to fly and to have a steady job for four years, the length of my contract as a reserve officer. As the end of the four years neared, the danger of hostilities increased. I liked flying, I had a good start in the Corps, and I believed that I was in an excellent position to be of use to our country in case of war. I was full of energy and ready to come to grips with the enemy.

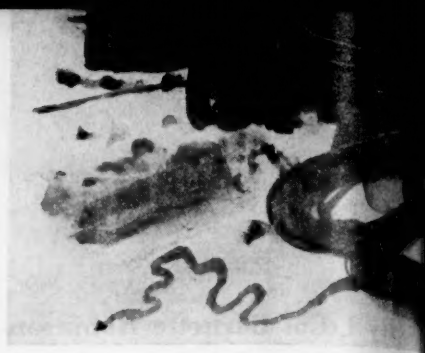
So, throughout the war, for nearly four years, I had trained pilots. I had seen the flyers I helped to train leave for combat and return. I had asked again and again for combat only to be assigned to one administrative job after another. I had learned the hard way that war is one percent shooting, with the balance a combination of a million other things.

War means hard work for which you may never see the results. It means eating your heart out for things you believe in that are ignored and lost in the necessities for bigger things. It means good times and good friends and sometimes a stretch of comfortable living. It is seeing lands that you have read and dreamed about and sights that you hardly believe yourself when you are looking at them. It means reading casualty lists of dozens of people who are almost as close to you as your brothers. It means, sometimes, trying to find a roof for your family when there is none to be had.

It means serving with people whom you watch grow old with responsibility and hard work in a few short years. It is learning that you need more bravery than just that required to face the enemy. You have to be brave enough to fight, in yourself and in your men, ennui, discouragement, homesickness and the desire to succumb to the luxury of depression. The weapons that you must use are all the enthusiasm and resourcefulness that you can muster.

It is knowing wonderful people, both military and civilian, whom you meet all over the world. After a while there is hardly any locality, particularly in the United States, where you can go and not be in the home town of some friend. It is seeing fine youngsters come into the organization and develop, acquiring skill, experience and poise. It means the satisfaction of helping to guide your part of an organization so that it can accomplish its mission most efficiently, and of discharging your responsibilities so that your outfit will merit the conservative praise of a "well done."

Throughout the 16 years I had trained and waited, and trained and requested combat, and trained and waited some more, I had never before been within 500 miles of any hostilities. Probably the greatest danger to which I had been exposed had been coconuts falling from trees on Pacific islands. Now in a few minutes I would be across the bomb line into enemy territory. I would be doing my best to destroy the



enemy, and he would try to destroy me. He could be one of the ricksha boys who had carried me through the markets of Peiping. He might be the Chinese general with whom I once had eaten lunch at the American Club in Shanghai. Or he could be the cousin of the shy Korean houseboy who ironed the shirt I was wearing. I would not have anything personal against these people, nor they for me. We were merely on opposite sides of a political barrier. He had to fight and risk being killed or face the certainty of a worse death under the yoke of tyranny that he wore, and we had to fight or risk the loss of all we had gained in the long struggle of men for freedom from that yoke.

I remembered what Suh Won Kyung, a school teacher, had told me. "It is not a war between North and South Koreans," he had said, "because they are the same. It is war between Communism and the Free World. A few years ago we had never heard of Communism. Now, if my own kinfolk in North Korea see me they must kill me, and I must kill them." He had spoken with a gripping intensity, and the next thing he had said would chill your blood. "It happens that the war is in Korea, but it could be anywhere in the world. *It could be in the United States.*"

WE HAD cut across a part of the Yellow Sea, and now the gray mud flats, so common along the coasts of China and Korea, loomed ahead. That would be the North Korean coast. Ours was a pre-briefed mission on the Haeju Peninsula where little flak had been encountered. We had been warned, though, to use all evasive measures, for one never did know when flak would be there. Strikes may be run in a particular area for weeks without a bullet being fired in return, and then all tarnation will bust loose when the next flight comes over. Or a hot area may, for no obvious reason, suddenly become flak-free.

Jess spotted our target and gave us a signal to go into column. I looked at the area we were to hit. There was a town—or what was left of one. Stark, burned hulls of factories and good-sized buildings stood among acres of rubble, with a building here and there that looked only slightly battle-scarred. Good, wide roads radiated into the hills and rice fields and wound toward the northern interior. A railroad connected the town to a deep-water inlet.

There was something peculiar about the appearance of this country, something strange and unnatural, and it was a minute before I realized what it was. In all this land that we could see from our perch in the sky, this land with its towns, its ports, its roads, its homes and its factories, there was not one sign of life. No vehicle moved along the roads, not a ship was in the water, not a soul walked in the streets, and no smoke came from any factory. A pall of death was over the land.

WE KNEW that at night the roads bore the traffic of war, and people appeared in large numbers. That dark spot on the shoulder of the road looked like a haystack, but it might be a foot of hay and several feet of Stalin tank. The shadow of that tree might cover the entrance to an underground revetment with a truck in it, loaded with supplies. At night the people and the vehicles moved busily about their work, but the first daylight froze all movement above the ground, and the ghost of the land hurried back to its grave.

We kept a sharp lookout for enemy planes, and Jess maneuvered us to a point between the sun and the target. Our strike would aim at the edge of the town, at an intact factory with some smaller buildings around it. Jess gave us a call.

"Butterball flight, I will begin my attack in about 15 seconds."

The seconds ticked off and plane Dash One streaked toward the earth. The ground sparkled as bullets from the wing guns struck and exploded. When the trajectory of the airplane began to curve toward the horizon, we knew that the bombs were away. Two puffs of smoke showed near the center of the group of buildings. Those would be the light wing bombs. A little farther in the direction of the dive and a second later, a flash of fire jumped out of a building where the heavy had hit, and a column of smoke rose. The second plane was ready to start.

After number two dove, Bob Threlkell called, "Dash Three rolling in." I was fairly close behind him, watching his method. He called another message, but I didn't hear what he said. Then I noticed that he was not diving directly at the target, but turning and twisting. Something wrong with his airplane? Streaks of light were going past him. I looked for an enemy plane, but if there was one, he was invisible to me. Bob's hit was accurate, on the right hand edge of the building group.

I called my dive and rolled into it. There was the target, but it wasn't in the right place. Much too far in front of me. Hang it all, I had misjudged my position to start the dive and had gone too far past the target while I was watching Bob. Now the dive would be too flat, and the bomb would likely fall short. Determined to do better, I leveled out and flew toward the target a moment before pushing the nose down again. As the nose cowl lowered to where I could again see the target above it, I was weightless in the seat, and only the straps kept me put. My flashlight, hanging by a string around my neck, floated lazily before my face. The plane had changed direction faster than things inside the cockpit that were loose. Particles of dirt from the floor rose to the canopy and got into my eyes. Then, as the plane steadied in the dive, articles went back to their proper places, and things looked better—for a moment.

There were those streaks of light again, but this time they were close to me, bright as shooting stars and coming from a point on the ground off to the right. A ball of fire burst to my left, and a small patch of black smoke hung in the sky.

"Hey, those guys are shooting at me," I yelled into the microphone.

Number Three called me back.

"That's what I just told you. This place is hot. Jinx like mad."

I still had part of my dive to go, and I swerved to the left, then rolled

to the right and straightened toward the target so I could release. Fireworks around me were blazing. Must ignore them now, I told myself. A few more seconds to get steady on an aiming point. Move the stick a fraction of an inch and it would change the point of impact by the width of a building. It could mean that some people would live, and others would die. The difference of an ounce of pressure on the stick or the difference of a second in the time of release might mean a world of difference in the future of several men and could seal the destiny of who knows how many people.

This was a moment for which I had trained and trained and trained. Countless numbers of people had helped to prepare my airplane, my bombs and my equipment and to pay for their production. Hundreds of Marines who would never see a bomb line had worked to make this moment possible. The mechanics, the ordnance men, the refueler operators, communication men, typists and the post exchange clerk who sold a toothbrush to a man who operates the laundry that washed the clothes of an electrician who wired our office all were part of the group whose efforts had one ultimate purpose—to drop ordnance on the enemy. The job of pushing the release button is only incidental, but many of those men would give their right arm for the chance. I was the one now trusted with the job. If I should fail, all the work that had been done to get the bomb to that point would have been in vain.

Push the gun button. Feel the recoil of the guns, like a big hand tugging back on the plane. Watch your tracers and the point of impact. Walk the bullets through the buildings from one to another with a little pressure on the stick. Place the sight on the target. Not yet, for the target is still too far away, but it is coming up fast. Not now, nor now, but NOW!

Away went the small bombs, away went the big one. I was getting low and the streaks of light had stopped. I grunted with the pressure of the pullout. When I had pushed over, I had left my weight up there. Now I got it all back and more. The centrifugal force was at it again, but now I was on the inside of the curve instead of the outside. My plane was a centrifuge, pulling the blood away from my head and trying to concentrate it in my legs. My vitals stretched their moorings, and were having to keep living while weighing several times their normal amount.

I felt the comfortable pressure of the G-suit as the centrifugal force opened a control valve in the airplane and compressed air flowed through the tube connected to my suit. The bladders built into the suit expanded against my thighs and calves and in the pit of my stomach. The flow of blood to my legs was limited, and my innards were held in place. I started to level off, the valve closed, and the suit deflated.

I started twisting again in the climb to jinx from ground fire and to see my hits. The small bombs had burst in the far edge of the target. Then, WHOOM! I saw the flash and smoke from the big one, near a building at the edge of the group. We headed for the sea and our rendezvous point.

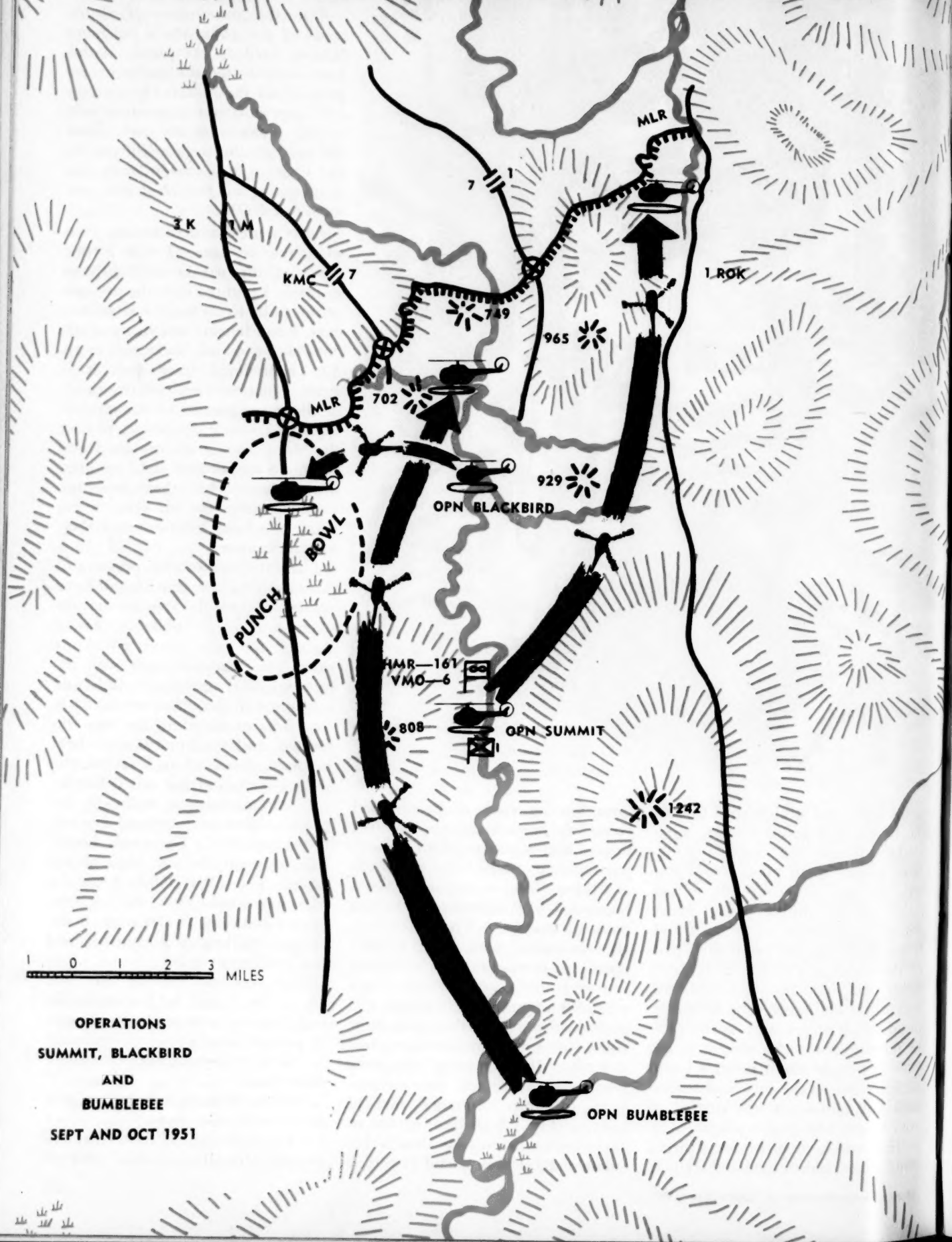
Our compass swung to the course for home, as Jess made the call that is always music to the ears of all our people who are listening.

"Hello, Pipestem, from Butterball dash One."

"Hello, Butterball dash One, this is Pipestem. Go ahead."

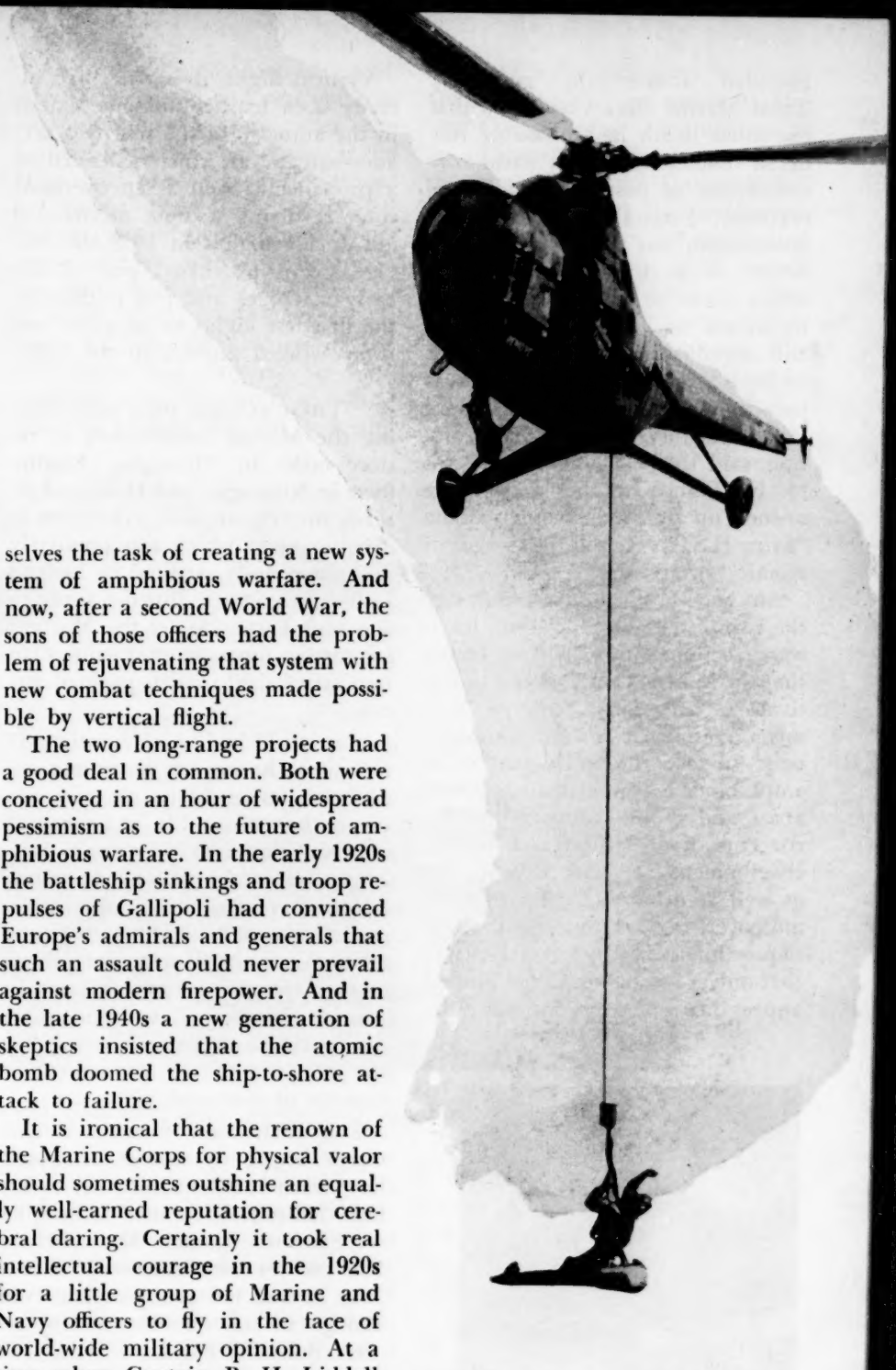
"This is Butterball dash One, outbound, with all my chicks." USMC

FLYING WINDMILLS IN KOREA



OPERATIONS
SUMMIT, BLACKBIRD
AND
BUMBLEBEE
SEPT AND OCT 1951

By **Lynn Montross**



THE MARINES HAD BEEN IN Korea less than 24 hours when the helicopter got into action. On 2 August 1950, the 1st Provisional Marine Brigade landed at Pusan. And early the next morning the commanding general, BrigGen Edward A. Craig, made a reconnaissance flight in an HO3S-1 of Marine Observation Squadron 6.

This flight marked the dawn of a new day in command relations. Thanks to the helicopter, a general and his staff could now maintain a direct physical contact with operations at the front such as had never been possible before. Not only was vertical flight an aid to reconnaissance, but it enabled a commander to keep in personal touch with his units, since the helicopter could land practically anywhere without asking favors from the terrain. Thus the brain of the military body was given a closer and more immediate degree of control over the muscles and sinews.

This was one of the results of the studies and tests begun in 1946, when the United States Marine Corps took the lead in the development of helicopter combat techniques. The Marine Corps Schools at Quantico served as the tactical laboratory. Again history had repeated itself, for it was in those red brick buildings at Quantico that Marine officers of the 1920s set themselves the task of creating a new system of amphibious warfare. And now, after a second World War, the sons of those officers had the problem of rejuvenating that system with new combat techniques made possible by vertical flight.

The two long-range projects had a good deal in common. Both were conceived in an hour of widespread pessimism as to the future of amphibious warfare. In the early 1920s the battleship sinkings and troop repulses of Gallipoli had convinced Europe's admirals and generals that such an assault could never prevail against modern firepower. And in the late 1940s a new generation of skeptics insisted that the atomic bomb doomed the ship-to-shore attack to failure.

It is ironical that the renown of the Marine Corps for physical valor should sometimes outshine an equally well-earned reputation for cerebral daring. Certainly it took real intellectual courage in the 1920s for a little group of Marine and Navy officers to fly in the face of world-wide military opinion. At a time when Captain B. H. Liddell Hart and other critics were preaching the doctrine of the all-powerful defensive, these Fleet Marine Force pioneers believed that the most dangerous form of the offensive could be made to succeed.

Their faith was vindicated in World War II by the American invasions of Africa, Sicily, Italy, Normandy and the Japanese islands of the Pacific. Most of these victories were won either by Marines or Marine-trained Army and Navy units using Fleet Marine Force techniques. Not a single major defeat could be charged against a system of amphibious assault which a British historian of World War II has called "in all probability . . . the most far-reaching tactical innovation of the war.[1]"

But the explosion that rocked Hiroshima in 1945 also shook the confidence of many Americans in the tactics which won some of our most brilliant victories. Again a little group of Marine officers had the intellectual courage to differ, even though several famous names were

In cooperation with the Historical Branch, G-3, Headquarters, U. S. Marine Corps, the GAZETTE herewith presents the last in a series of official accounts dealing with Marine operations in Korea. Prepared by writers and researchers of the Historical Branch, these articles have been based on available records and reports from units in Korea.

Admittedly it is too soon to write a definitive history of Marine fighting in Korea. Not only are enemy sources lacking, but even Marine and Army records are still incomplete. Articles of the length to be used in the GAZETTE, moreover, do not allow space for more than an outline of operations which will ultimately be given the detailed treatment of a monograph.

But timeliness is also an end to be sought, thus these preliminary narratives have been based on Marine and Army reports received up to this time.

[1] MajGen J. F. C. Fuller: *The Second World War, 1939-1945*, (London, 1948).

included among the pessimists. These Marine officers conceded that the atom bomb had probably rendered obsolete the great naval concentrations of past amphibious operations. Tactical dispersion, they maintained, was the answer to "the bomb" — a degree of dispersion which could be put into effect only by means of vertical envelopment and aerial supply. But such past methods of vertical envelopment as parachute or glider landings were not satisfactory. The ultimate solution, said these Marine officers, was to be found in the possibilities opened up by the helicopter as the "flying LST" of the new age of atomic warfare.

Any such brief summary must run the risk of over-simplification, for it was a complex new field of tactics that the Marine Corps set out to cultivate in accordance with its basic mission as America's force-in-readiness. In fact, the entire pattern of amphibious assault had to be taken apart and rebuilt around the new concepts of dispersion and vertical envelopment. It took imagination as well as cerebral daring in 1946, moreover, to work out combat techniques for a type of aircraft so new that only a few had made an obscure appearance in the recent war.

HMX-1 . . . the original crew

Vertical flight, it is true, had already been realized to some extent in the autogiro of the past two decades—an aircraft which depended on a propeller as well as an overhead rotor revolving without mechanical aid during flight. In 1932 the Marine Corps purchased one of the early machines and put it through the first test flights to be given any rotary-winged aircraft in the field.[2]

THESE FLIGHTS TOOK place during the Marine intervention to restore order in Nicaragua. Marine fliers in Nicaragua and Haiti had already worked out such techniques as dive-bombing, which was popularly and erroneously credited in 1940 to Luftwaffe aviators. But the autogiro was found wanting by the Marines for combat purposes after exhaustive tests established that its payload was deficient.

The world had to wait until 1937 for a true helicopter depending entirely on power-driven rotary wings for both vertical lift and forward motion. This first practicable helicopter was a German product, but its military possibilities apparently did not appeal to the Luftwaffe generals. Altogether, rotary-winged aircraft played a very minor part in World War II, and not until 1942 did Igor Sikorsky's experiments give the United States its first helicopter capable of sustained flight.

Four years later, when the Marine Corps began its studies, it would have been rank exaggeration to say that helicopter combat techniques were in their infancy. Most of them had not yet been conceived. World War II had left few precepts, even though several Sikorsky helicopters were flown by the U. S. Army Air Corps in Burma and the Philippines during the last months of the war in the Pacific. But these machines, which seem to have been regarded as curiosities, made little impression on operations decided entirely by conventional aircraft.

The Marine Corps was starting from scratch, therefore, when it commissioned its first helicopter squadron late in 1947. Commanded by Colonel Edward C. Dyer, HMX-1 was assigned two general missions:

(1) "Develop techniques and tactics in connection with the movement of assault troops by helicopter in amphibious operations;

(2) "Evaluate a small helicopter as a replacement for the present OY-type aircraft to be used for gunfire spotting, observation and liaison missions in connection with amphibious operations."

The original eight officers and one enlisted man had no helicopter experience whatever. Colonel Dyer took his flight training at the helicopter factory, and other HMX-1 pilots and mechanics were trained by the few qualified instructors of the Naval Air Schools at Lakehurst, New Jersey. Two months passed before this pioneer helicopter unit received its first aircraft—two four-place Sikorsky machines (HO3S-1) designed for utility work. The first mission, other than training, was a search for the route to be followed by a salvage party in removing a mired-down "Weasel" (amphibious jeep) from a creek near Quantico.

FROM THIS MODEST beginning, HMX-1 reached the stage six months later of participating with 16 officers, 40 enlisted men and five HO3Ss in Operation Packard II. This was an amphibious command post exercise held by the Marine Corps Schools from 10 to 26 May 1948 in the area of New River, N. C. As it concerned HMX-1, the exercise was an initial test to determine the value of the helicopter in the movement of troops for an amphibious assault. The squadron had two weeks of preliminary shipboard training on the carrier *Palau*, and the ensuing operation proved that the new amphibious team of carrier and helicopter had many advantages over the old system of transport and landing boat.

On the evidence of the New River tests, the Marine Corps Schools brought out in 1948 their first doctrinal publication on the tactical employment of helicopters. Theory and practice went hand in hand at Quantico as HMX-1 pilots conducted experiments in such diverse missions as traffic direction, rescue work, formation flying, fighter evasive tactics, high-speed wire laying and an

[2] For a detailed account of the tests, see the article *The Marine Autogiro in Nicaragua* in the GAZETTE of February 1953.

airborne public address system. In August 1948, the squadron received its first HTL-3, a two-place Bell helicopter useful for artillery spotting, reconnaissance and aerial photography. Troop movement training was given a great impetus this same month with the arrival of the first HRP-1 — a twin-rotored, 10-passenger Piasecki helicopter, then the world's largest, which was soon to be dubbed the "Flying Banana."

In November an HO3S-1 from the squadron participated in the exercises of the Second Task Fleet in the Newfoundland area. And on Christmas day three HRPs sailed from Norfolk on the *Saipan* for a rescue mission in Greenland which afforded good Arctic training even though it proved unnecessary. These cold weather operations were followed in the spring of 1949 by tests under tropical conditions when four HO3Ss and an HTL took part on board the *Palau* in the Atlantic Fleet Exercises (FLEX-49) off Puerto Rico.

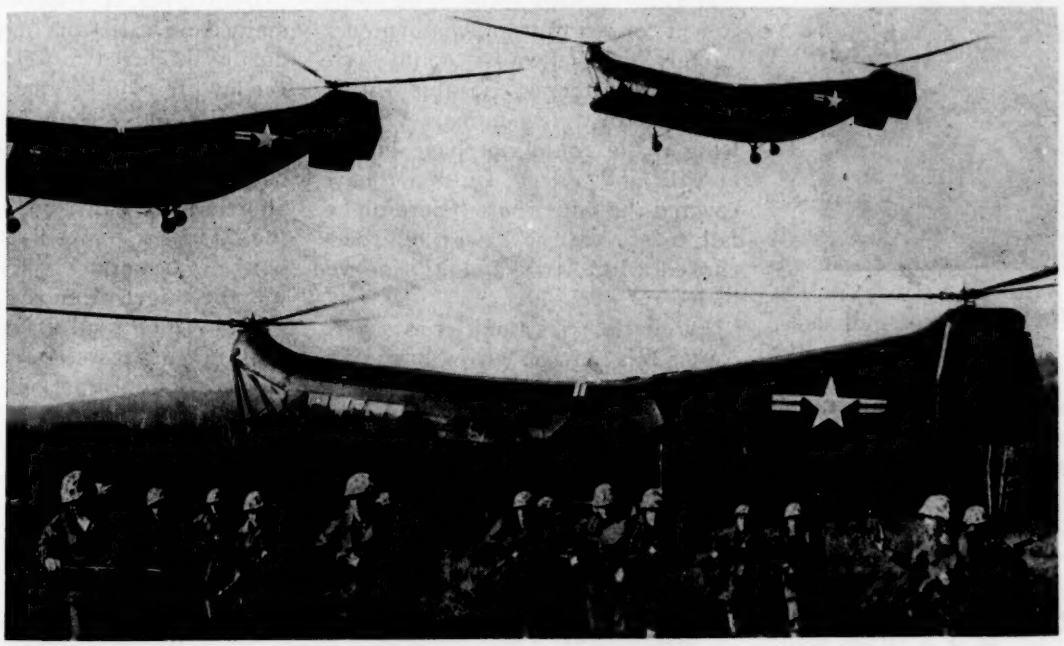
Nine HRPs were employed by HMX-1, in conjunction with Marine air and ground forces, to demonstrate helicopter combat techniques at Quantico in May 1949 before members of Congress and high military officials. Shortly afterward the squadron left for New River to board the *Palau* and take part in Operation Packard III.

An instructive comparison was offered between old and new amphibious assault techniques when the landing boats hit the beaches as the "Flying Bananas" were lifting troops five miles inland for a simulated vertical envelopment. Many of the boats were swamped in the rough seas, and others were long delayed in tying up to the AKAs on their return. Yet, the effectiveness of the helicopters, each carrying six fully equipped combat troops, was little impaired as they shuttled back and forth from the carrier to their inland objective. Cover was provided by fighter aircraft simulating smoke and by strafing attacks on defensive forces.

The first week of 1950 found HMX-1 with a strength of 26 officers (of whom 21 were fliers) and 83 enlisted men, including two pilots. The squadron was represenetd by a detachment in Operation Crossover, held by the 2d Mar Div at Camp Lejeune during the last three days in April. Here a helicopter lifted a 75mm pack howitzer with its crew and ammunition during the simulated amphibious assault.

Operation Packard IV took place late in May, and the aircraft of HMX-1 made round-trip flights between the carrier *Mindoro* and the North Carolina target area. Most of the helicopter techniques of these exercises were presented again at Quantico on 15 June when the Marine Corps gave a demonstration of an airborne amphibious assault for the President of the United States.

Only 10 days later a Communist aggression in Korea led to United Nations intervention. U. S. armed forces were ordered to active duty in the Asiatic peninsula. This meant that Marine helicopter theory would soon be put to the test of combat, for the 1st Provisional Marine Brigade was activated on 7 July at Camp Pendleton under the command of BrigGen Edward A. Craig, and exactly a week later this reinforced RCT sailed from San Diego to the Far East.



With the "Flying Banana" came troop movement training

The air component, commanded by BrigGen Thomas J. Cushman, consisted of three fighter squadrons and an observation squadron of MAG-33, 1st Marine Air Wing. Included in this air strength was the first helicopter unit in history to be trained and organized for combat duty—the seven officers, 30 enlisted men and four HO3S-1 aircraft of the rotary-wing group of VMO-6. Major Vincent J. Gottschalk was the CO of a squadron completed by a fixed-wing group of six officers, 43 enlisted men and six OY-2 planes.

VMO-6 sailed for Korea on 14 July under the operational control of the brigade and under the 1st

'Copter lifts gave . . .

Marine Air Wing in administrative and logistical respects. The helicopter contingent had been sent from Quantico to California by HMX-1, and during the voyage to Japan the "flying windmills" carried mail from one ship to another. After disembarkation at Kobe, the four helicopters were part of a VMO-6 flight echelon which continued by air to Pusan, arriving on 2 August. A surface echelon followed by LST two days later.

The mission of VMO squadrons had been stated in 1949 as the conduct of "tactical air reconnaissance, artillery spotting and other flight operations within the capabilities of assigned aircraft in support of ground units."[3] This definition, of course, left plenty of room for the 'copters to show what they could do under combat conditions. The first demonstration came on the very first morning in Korea, when General Craig and his aides utilized the rotary-wing aircraft not only for reconnaissance but also for locating assembly areas and directing troop movements.

The brigade commander's initial flight took him from Pusan about 30 miles to the Changwon area. In route he landed to give instructions to the CO of the advance battalion. The pilot, 1stLt Gustave F. Lueddeke, set the HO3S-1 down in a yard between three native huts, and took off vertically a few minutes later. Next, General Craig selected the site for his forward CP and deposited his personal gear. Then he proceeded to Masan 10 miles away to confer with LtGen Walton W. Walker, CG 8th Army, and MajGen William B. Kean, CG 25th Inf Div. And on his return trip, General Craig landed three more times to issue orders to troop commanders.

Only the helicopter could have made this itinerary possible within a period of a few hours. A fixed-wing plane could not have landed at will, and a jeep could not have covered the same route before nightfall over narrow, twisting roads choked with Army and Marine vehicles.

Evacuation of casualties as a helicopter mission had an early test on 4 August with the bringing in of a wounded and a dead Marine. On the following day, three more casualties were taken to the rear, two of them from the steep slopes of ridges. For evacuation purposes, two 'copters were modified by removing the window on the starboard side and installing straps in the cabin on the opposite side to hold a stretcher securely.

Actual combat experience tended to deflate the legend of helicopter vulnerability that had grown up in training exercises. Despite the limitations of rotary-wing aircraft as to speed and altitude, their mobility enabled them to fly low and take advantage of hills, valleys and other natural cover for protection. The OYs proved to be more vulnerable, though faster and offering less of a target. On 6 August a "grasshopper" was lost as a result of enemy action, but the pilot and observer swam ashore after ditching in the sea. Three weeks later the squadron had its first fatality when enemy fire brought down another OY, and 1stLt Harold J. Davis died of injuries.

Both types of VMO-6 aircraft remained on call from dawn to dusk during the first two weeks in Korea. Enemy fire soon became an old story for pilots on reconnaissance flights or searching the mountain areas for bands of infiltrating Communists. Shortly after dawn on 7 August, as the Marines jumped off at Chindong-ni, General Craig's helicopter was the target of enemy mortars on the way to the advanced command post, making it necessary for him to land and continue on foot. Pilot Lueddeke managed to take off again without harm, though two shells exploded within a hundred yards.

The UN attack had the distinction of being the first sustained counter-offensive to be launched against the NK invaders who had advanced from Seoul to within 50 miles of Pusan. This vital supply port had to be held, and Chinju was the objective of Marine and U. S. Army assault troops under the operational control of CG 25th Inf Div. The 40 flights of VMO-6 aircraft that day included reconnais-

. . . rocket batteries . . .

[3] FMF Pac SOP #3-5, VMO Squadrons, dtd 28 Nov 49.

sance missions, evacuation of casualties and drops of food and water.

On 8 August the helicopters set a new record when the first casualty evacuation after darkness was completed successfully by Captain Victor A. Armstrong, who brought out a wounded regimental surgeon. Here it may be noted that the sensational publicity stunts of stateside factory pilots had given the American public an exaggerated idea of the aeronautical progress of rotary-wing aircraft. Actually, the helicopters of 1950 were comparable to the fixed-wing planes of World War I. Makeshifts often had to be devised by VMO-6 pilots who flew with their heads outside the window for vision in rainstorms, and who shifted rocks about the cabin to maintain the balance so essential to safety with this delicately-poised type of aircraft.

. . . a new mobility

Rescue missions were added to their duties on 10 August when 1stLt Doyle Cole's Corsair was hit by anti-aircraft fire while flying close support. As it glided into the sea not far offshore, General Craig looked on from Lieutenant Lueddeke's helicopter. And it was the brigade commander who supplied the muscle to hoist Cole from his raft into the machine as it hovered a few feet over the water. Later that same afternoon Lueddeke rescued a second Corsair pilot, Captain Vivian Moses, who had crash-landed behind the enemy lines. Unfortunately, Captain Moses was shot down again three days later, and the unconscious flier drowned in a rice paddy before Captain Eugene J. Pope could rescue him in a VMO-6 helicopter.

Brilliant close air support was provided by the two Marine carrier-borne fighter squadrons, VMF-214 and VMF-323, as well as elements of Japan-based VMF(N)-513. Often their results owed to the reconnaissance of VMO-6 aircraft, and there was no better morale factor than the knowledge that the 'copters would attempt a rescue if a fighter pilot crashed in enemy territory.

Heavy NK resistance in the Chindong-ni area held up the infantry attack from 7 to 9 August, and General Craig was directed by General Kean to assume operational control of all Army as well as Marine units. During this critical period the brigade commander relied upon VMO-6 helicopters for command and staff missions. And though he could not actually be in two places at once, General Craig gave that illusion with his frequent landings to confer at Army CPs or direct commanders of combat units.

Such occasions had a historical significance. For the helicopter promised to bring back a personal element to command relations that had largely been lost in modern times. Obviously it was no longer possible or even desirable for a general to lead the advance in person. But it could be argued that the pendulum had swung back too far when a division commander and his staff were sometimes remote figures to junior line officers. General Craig's helicopter did a good deal to restore the balance, however, by bridging the time and space gap which usually separated a present-day commander from troops in combat. The Marine general became a familiar sight to company and even platoon commanders as he landed to give oral instructions, and his energetic leadership had much to do with the smashing of NK resistance.

Marine and Army units raced along parallel routes toward Chinju, driving the battered NK forces ahead of them. As the first United Nations victory of the war, it was heartening to troops who had been retreating since the initial Communist aggression. But with the objective in sight, the Marines were pulled back on the 13th in preparation for a new counter-attack in the Naktong Bulge area.

As a preliminary, General Craig received orders from General Kean at noon on the 12th to rush a reinforced battalion about 25 miles to the rear in the Chindong-ni area, where infiltrating Communists had overrun an Army artillery battalion and threatened to cut the MSR. Only the helicopter could have enabled the Marine general to execute in a single afternoon a maneuver calling for the 25-mile road lift of a reinforced battalion with its munitions, and an assault in the opposite direction. After taking off from his CP at Kosong, he made two landings to give orders to the regimental and battalion commanders. Next, he spotted columns of trucks from the air and landed twice more to direct them to dump their loads and provide transportation. His G-3 and the battalion commander had meanwhile been sent ahead by helicopter to reconnoiter the objective area and plan for the Marines to deploy and attack upon arrival. Owing to these preparations, the assault troops seized part of the enemy position before darkness and finished the job in the morning.

From his helicopter, General Craig saw the attack launched at sunset while flying to Masan for a conference with General Kean. There he was informed that all Marine and Army forces were to be pulled out at daybreak, and he returned to Kosong just before nightfall to plan a withdrawal that was carried out successfully in the morning.

Helicopters were used by the brigade command and staff to maintain positive control over the heavily engaged rear-guard battalion as it broke off contact with the enemy. One of the machines "dodged" enemy 20mm fire to drop panels to Marines on a 1,600-foot ridgeline, and another helicopter had rifle grenades lobbed at it after landing at the battalion CP. VMO-6 flights that day totaled 45, adding up to 53.9 hours in the air.

The Marine ground-air team, as the "firemen" of the Pusan perimeter, launched two more counter-attacks before being relieved on 5 September. In both of these Naktong Bulge assaults, VMO-6 aircraft carried out their usual missions, though the HO3S-1s scored a new "first" on 3 September with a successful helicopter wire-laying mission in combat. A total of 898 flights and 805 hours was reported by the squadron for August, of which the helicopters made 580 flights totaling 348 hours and the OYs 318 flights for a total of 457 hours.

Throughout the brigade operations the helicopter had been, as General Craig put it, the "emergency weapon" of the command and staff. Early in August he sent a message to LtGen Lemuel C. Shepherd, Jr., CG FMFPac, another warm advocate of rotary-wing aircraft, requesting that machines of troop-carrying capacity be attached to the brigade. But such equipment was not available at the time, and helicopter troop lifts in Korea had to wait until the following year.

The helicopter had not made its excellent showing, however, at the expense of the OY plane. One of the primary misisons of HMX-1, it may be recalled, was determining the relative value of the two types for the missions of an observation squadron. On a basis of training exercises, it was recommended at Quantico that OY planes be replaced by helicopters. But this decision was reversed, on the strength of combat experience with the brigade, by a recommendation of VMO-6: "A composite squadron composed of light OY-type liaison aircraft and liaison-type helicopters is considered both desirable and necessary."

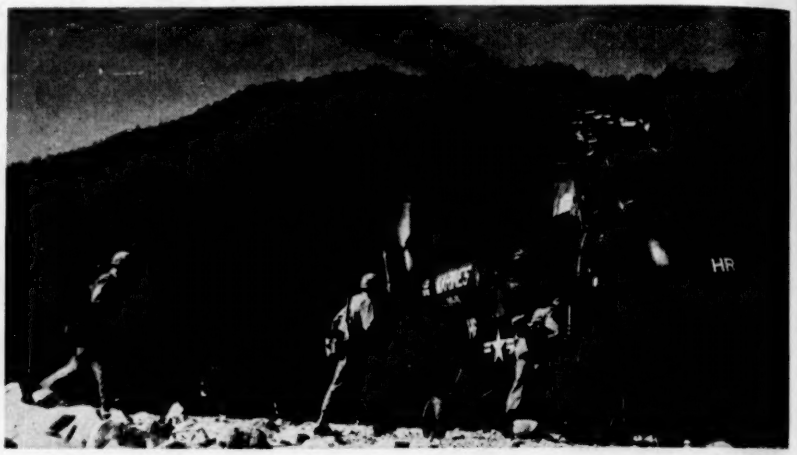
In preparation for the Inchon amphibious assault, VMO-6 passed under the operational control of the landing force, the 1st Mar Div commanded by MajGen Oliver P. Smith. The two echelons of the carrier-based squadron reached the target area with a strength expanded to 15 officers, 95 enlisted men, five OY-2 planes and six HO3S-1 aircraft.

No part was taken in the landings of 15 September, but on D+1 a helicopter flew the artillery observer conducting the first spot mission for the 11th Marines. And at 1000 on the 18th, only a few hours after the ground forces repulsed an enemy counter-attack, Captain Armstrong made the first landing at captured Kimpo Airfield, with General Shepherd as a passenger in his helicopter.

As the operation turned into a grinding assault on Seoul against mounting resistance, the Kimpo-based aircraft of VMO-6 had their job cut out for them. Operating over a large area, they were frequently exposed to intense small arms and automatic fire. Two OYs and a helicopter were destroyed during the three-week offensive with the loss of two pilots killed and a third missing as a probable POW.

It was a fairly typical day's work on 23 September when VMO-6 flew 10 reconnaissance, five artillery spot, one utility, six evacuation and two rescue missions for a total of 30.2 hours. The results were five artillery registrations, four artillery fire missions and the rescue of a Marine fighter pilot in enemy territory north of the 38th parallel.

After the crossing of the Han, the river separated the division CP from the units attacking the approaches to Seoul. Traffic was so congested that jeeps taking the pontoon ferry were subject to long delays. Helicopters offered the solution, and both General Smith and General Craig made daily use of them to visit battalion CPs on the north bank of the Han.



An easy way over saw-toothed ridges

Helicopters provided the answer again the following November when the 1st Mar Div was so extended in northeast Korea that units at Hagaru were about 50 miles from the division CP at Hungnam. Following an administrative landing at Wonsan, the Marines had unusual command and staff problems. As a result of personal reconnaissance flights in VMO-6 aircraft, General Smith ordered the Chosin Reservoir MSR to be strengthened for tanks, and a C-47 airstrip to be commenced at Hagaru. Thanks to such far-sighted command decisions, the 1st Mar Div was probably the best prepared major unit on the UN front when the first CCF counter-offensive exploded late in November.

VMO-6 began the operation with a strength of 15 officers and 87 enlisted men plus seven aerial observers attached from the division. Aircraft consisted of six HO3S-1s, three OY-2s and two L5-G types, flying from Yonpo Airfield along with fighter squadrons of the 1st MAW.

VMO-6 pilots tackled their greatest task so far when the CCF attacks of late November divided the 1st Mar Div into five self-contained perimeters along the MSR from Chinhung-ni to Yudam-ni. For a few days the only dependable physical contact was provided by helicopters, and VMO-6 operations were conducted from the half-finished Hagaru airstrip in order to save time. Rugged terrain, sub-zero cold and high altitudes added to the trials of fliers who often encountered CCF small arms and automatic fire. Two pilots were killed in action and the aircraft required frequent repairs. Many lives of ground Marines were saved, however, by emergency helicopter evacuation of casualties from isolated perimeters. Other VMO-6 missions contributed in tactical respects to the fighting breakout of the 1st Mar Div with most of its equipment. From 28 October to 15 December the squadron made 1,544 flights for a total of 1,624 hours. The chief missions were as follows:

Reconnaissance—OYs, 393; helicopters, 64; *Transportation*—OYs 130; helicopters, 421; *Evacuation*—OYs, 29; helicopters, 191; *Liaison*—OYs, 35; helicopters, 90; *Artillery Spot*—OYs, 39; helicopters, 0; *Utility*—OYs, 26; helicopters, 60; *Rescue*—OYs, 0; helicopters, 11.

This was about the pattern that VMO-6 missions were to take in support of the 1st Mar Div as it participated in 8th Army attacks throughout the spring of 1951. The Pohang-Andong guerrilla hunt was followed by Operations Killer and Ripper, then by the CCF counter-offensives of April and May. And when the 8th Army struck back in June, the Marines had their hardest fighting since the Chosin Reservoir breakout.

VMO-6 had grown by this time to a strength of 28 officers and 94 enlisted men with 21 aircraft—seven OY-2, four L-19, five HO3S-1 and five HTL-4 types. Infantry casualties were heavy during the first two weeks of the month, and in June the helicopters evacuated 198 wounded Marines from mountain terrain while making three rescues behind enemy lines.

On 15 July the division went into 8th Army reserve in the Yanggu-Inje area, but VMO-6 continued its reconnaissance flights during the ensuing training period. As the first year of Korean operations neared an end, it might have appeared that Marine helicopters had performed in combat nearly every mission except the one originally visioned—the mission of transporting troops and supplies for future amphibious assaults. A step had already been taken to remedy this lack, however, when Marine Transport Helicopter Squadron (HMR) 161 was commissioned on 15 January at El Toro as a unit in Aircraft FMFPac. After a seven-month training period under the command of LtCol George W. Herring, the squadron sailed for Korea in August with a strength of 43 officers and 244 men. Equipment consisted of 15 Sikorsky transport (HRS-1) helicopters capable of carrying five or six fully armed troops each.

HMR-161 landed at Pusan on 2 September under operational control of the 1st Mar Div, which had recently mounted an offensive in the Punchbowl area. It did not take the new outfit long to get into action. Only a few days after moving up to the front, HMR-161 indoctrinated troops of the 1st Shore Party Bn on 12 September in loading and landing techniques. And at 1600 the following day the squadron initiated the first mass helicopter re-supply operation in history.

Operation Windmill I consisted of lifting a day's supplies for the 2d Bn, 1st Marines a distance of about seven miles. Shore party personnel accompanied the first four aircraft; they landed with picks and shovels to clear an area for the dumps, and 78 casualties were evacuated on return flights. Performance did not fall short of plan, and 14 helicopters were employed for 28 flights amounting in all to 14.1 hours. A total of 18,848 pounds was lifted to a landing point a hundred feet square at an altitude of 2,100 feet.

Windmill II a few days later added little to knowledge already gained, and meanwhile the squadron prepared for Operation Summit. This time the problem was tactical—the lift of Recon Co to a razor-back ridge, Hill 884, for the relief of a ROK unit. The helicopters flew reconnaissance on the position and held practice flights in which the troops rehearsed their descent from

Flying behind the hills, they brought out the wounded

30-foot knotted ropes. And on 20 September, despite the fog, HMR-161 completed the first helicopter-borne landing of a combat unit in history by lifting 224 fully equipped troops to the objective and 17,772 pounds of cargo in addition to supplies carried by the men.

Two sites had been selected in advance just below the crest. Only about 50 feet square, owing to the rocky terrain, these landing points had sheer drops on two sides. An assault squad of Recon Co landed at the outset to cover the SP troops who followed to clear the first area.

Flying time from the loading point averaged eight minutes, and it took about 90 seconds for four men with full equipment to land by rope. A second landing point was opened 20 minutes after the first, and five men were carried in each 'copter thereafter to exit on the ground in an average of 20 seconds. Thus the troops continued to pour in steadily until the completion of the operation in 65 flights amounting to 31.2 hours flying time and four hours over-all time. As a final touch, eight miles of wire were laid in 15 minutes to the CP of the 1st Marines.

On this same day, after the successful completion of the offensive begun in late August, the mission of the 1st Mar Div was changed to one of occupying and defending. The assigned frontage of 20,000 meters made it a problem to man the MSR and still keep up an adequate reserve. The left flank being weakest, a five-mile helicopter lift of a company from the division reserve bivouac area was contemplated in case of urgent need. And since an emergency would probably take place at night, it was decided that a full-dress rehearsal should be held for a lift under cover of darkness.

This was the inception of Operation Blackbird. The rehearsal was carried out on the morning of 27 September, with night conditions being simulated as closely as possible. But darkness itself could not be simulated, and many difficulties remained to be overcome at H-hour of 1930 that evening.

A company of the 2d Bn, 1st Marines had been selected, and each helicopter carried five fully equipped troops. It took 41 flights by six machines to transport the 233 men in the over-all time of two hours and 20 minutes, as compared to the nine hours required for a march over mountain trails. Still, it could not be said that Operation Blackbird was an unclouded success. The flare pots illuminating the embarkation area were frequently blown out by rotor wash, and meanwhile they blinded the pilots by creating a glare on plexiglass windshields. Battery-operated beach lanterns in the landing zone were hard to distinguish from other lights.

Artillery flashes added to the visibility troubles of pilots taking off from a river bed and climbing through three mountain passes to reach the objective. Although care had been taken in rehearsal to memorize terrain features, difficulty was experienced in locating the Punchbowl landing area. The shuttle system was used, with intervals of three minutes between departures, and the round-trip covered 13 miles. Good communications were maintained between the aircraft base, embarkation point, landing zone and helicopters in flight by means of a VHF circuit.

But even though there had been confusion, Operation Blackbird left many encouraging precedents as well as a few object lessons. And two weeks later HMR-161 completed a

Korea proved to

VMO-6 . . . pilots flew more than a thousand missions in forty-eight days

...ved to ...ject lab for the windmills

helicopter lift that made headlines all over the world—the lift of an entire Marine battalion and its equipment.

The purpose was to acquire planning experience by determining time factors of such a tactical movement. An opportunity arose when the 3d Bn of the 7th Marines, commanded by LtCol Harry W. Edwards, was directed to relieve a battalion of the 5th Marines. Oral warning orders were issued on 8 October, and members of the battalion TACP reconnoitered the assigned assembly area located directly behind the MLR and screened from enemy observation. Planning was conducted as if for an amphibious operation, with the assignment and loading table for the HRS-1s being modeled after that of a boat assignment table.

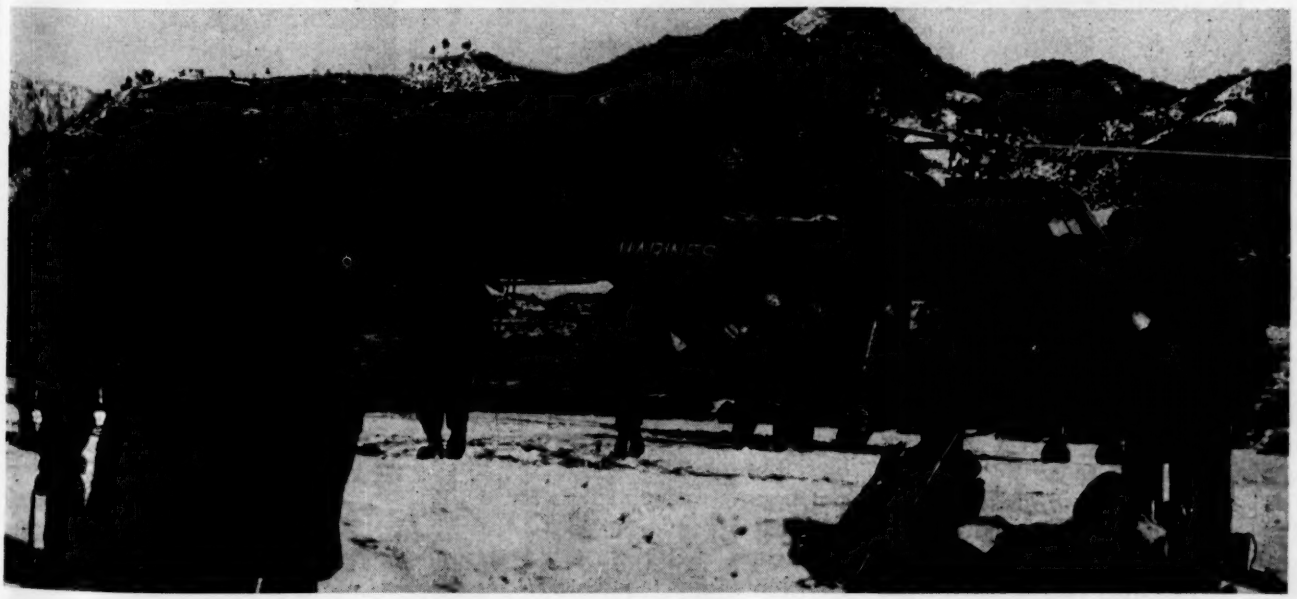
As preparations reached the final stage on the 10th, all officers of the battalion watched a loading and unloading demonstration by enlisted men of Item Co, assisted by SP personnel. Operation Bumblebee began at 1000 the next morning when the first helicopter team departed. The flight path of 15 miles, though longer than necessary, took advantage of the concealment offered by valleys and defiladed areas. Ten to 12 minutes were required to cover one leg of the journey, but six men with combat equipment could be loaded in less than 30 seconds. Dispatchers at Red and White loading zones checked off departing teams against the roster, and any shortage was filled immediately by a man from the casual pool.

As THE HELICOPTERS landed at intervals of a minute, the troops were briskly assisted to the ground by the SP personnel who had cleared the two landing points. A six-man team could exit in 17 seconds, and new arrivals were hustled by guides to their own company assembly areas. Following are the principal statistics of Operation Bumblebee, which alone tell a story:

Number of helicopters: 12.
Number of flights: 156.
Total flight time: 65.9 mins.
Over-all time: 5.50 hrs.
Number of troops lifted: 958.
Average weight per man: 340 lbs.
Total weight lifted: 229,920 lbs.

Newspaper correspondents in Korea were quick to sense that tactical history had been created, and wire stories of Operation Bumblebee made the front pages all over the world. Gratifying as this acclaim was, however, Marine planners considered the achievement a beginning rather than an end. A great deal more perspiration as well as inspiration would be needed if the Marine Corps was to maintain its leadership in developing helicopter combat techniques, and HMR-161 completed two more operations in October.

Battalion lifts by helicopter were to become routine events in the 1st Mar Div sector during the next few months, but Operation Bumblebee remained a landmark of the progress made in a little over a year of Marine combat experience. The concepts advanced in 1946 at Quantico had stood the test of war, and future ship-to-shore assaults would owe immeasurably to these pioneer helicopter operations in Korea. USMC



Battalion lifts became commonplace after Operation Bumblebee

in brief

The world's skeet-shooting record was recently broken by five Marines, representing Camp Lejeune, at the Great Cotton States Open Shoot at Spartansburg, N. C. The shooters topped the old record by four points when they hit 741 targets out of 750.

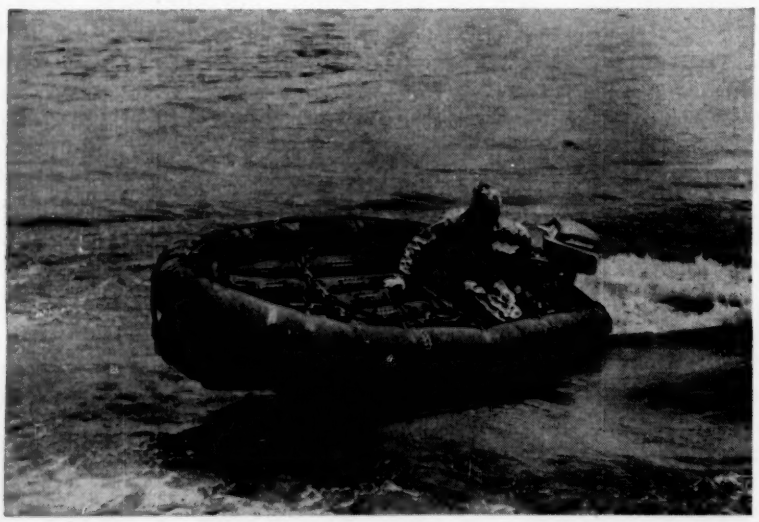
A new jet speed record of 715.697 miles per hour has been set by LtCol William F. Barns, USAF, in a F-86D Sabre over the three-kilometer course at the Salton Sea, Calif. The new record is 17.192 miles per hour over the previous mark made on the same course in another Sabre jet late last year. The F-86D Sabre is an interceptor version of the fighter used in Korea.

Speed and extreme maneuverability are two of the many new features of the four and nine-man reconnaissance boats recently unveiled by the Marine Corps Development Center at Quantico. Used to transport troops or equipment, the boats can be propelled either by paddle or outboard motor.

The four-man boat (below) with a 10 h.p. motor has a maximum speed of 20 knots, or 12 knots when carrying a 1,100 pound load. It is capable of turning a complete circle within its own length.

When powered with a 25 h.p. motor, the nine-man boat also has a maximum speed of 20 knots and can make 12 knots carrying its 2,450-pound maximum load.

The new boats are made of compartmented nylon fabric and have stepless, planing hulls. They can be inflated manually or with the carbon dioxide cylinder provided. Deflated, the four-man boat weighs 95 pounds, the nine-man boat 142 pounds, and both can be passed through an opening 25 inches in diameter.

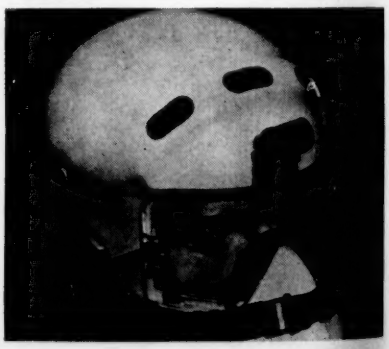


Both boats contain easily replaceable buoyancy tubes. These are so designed that, even with damage to 50 percent of the compartments, the boats can remain afloat and operable. The bladders inside the tubes can be removed and repaired while the boat is in motion.

Marines of Recon Co, 2d Marine Division conducted the tests on the new craft which was developed by the Playtex Corporation of Dover, Delaware to meet the military requirements and specifications of the Marine Corps.

About 40 percent of the enlisted MOSs in the Marine Corps will be eliminated under a new plan authorized recently. At the same time, 29 new MOS fields, including guided missiles, radar and electronics, will be added. The new MOS structure will go into effect in early 1954 when the new manuals are distributed. Under the new set-up, many fields will have more pay grades within the same MOS. Other cuts resulted from merging one or more MOSs in the same category. The new policy will also offer Women Marines opportunities in several new fields of aviation and weapons.

The first jet ace in Marine Corps history is Major John F. Bolt (above). He recorded his fifth and sixth MiG kills recently while flying with the 5th Air Force as an exchange pilot. Before being attached to the 5th Air Force for 37 Sabre jet sweeps, Major Bolt, credited with destroying six Japanese planes during World War II, flew 89 jet fighter-bomber missions with the 1st MAW, which had been assigned only close support and interdiction missions.



A new helmet (above) that will stay on a pilot's head even when he bails out at supersonic speeds, has been developed by the Air Force. The slots, cut into the crown section, reduce the windshock and airlift.

The tenth engagement star for the Korean Service Medal has been authorized for the 1953 Summer-Fall campaigns from 1 May to a date to be announced. Dates of eligibility for the ninth Korean battle star are 1 Dec 1952 through 30 April 1953.

The eyes of the world were focused on newspaper stories datelined "Quantico, Va." from July 23-26, as the Marine Corps Schools became one of the news capitals of the world for four eventful days.

Originally, the weekend was scheduled as a combination work-recreation period for Secretary of Defense Wilson's Pentagon team. Over 120 of the nation's top military and civilian leaders arrived Thursday, took up residence at the Bachelor Officers' Quarters and began a program of top-secret briefings, dinners and recreation periods.

Small groups, such as (above right) LtGen Clifton B. Cates, Commandant, MCS; General of the Army Omar N. Bradley, former Chairman of the Joint Chiefs; Secretary of Defense Charles E. Wilson; Admiral Arthur W. Radford, Chairman of the Joint Chiefs; Admiral Robert B. Carney, Chief of Naval Operations; and General Lemuel C. Shepherd, Jr., Commandant of the Marine Corps, discussed defense problems informally between formal briefings.

On Friday, President Eisenhower arrived to participate in the conference. He took time out from official duties to play a round of golf (right) on Quantico's tough course.

The following morning, routine aspects of the conference disappeared. When the President announced that the 3d Mar Div had been assigned to the Far East, reporters scurried for their typewriters and telephones. With the base alerted for transfer of nearly 1,000 Marines to the 3d Mar Div, the feeling of urgency was increased.

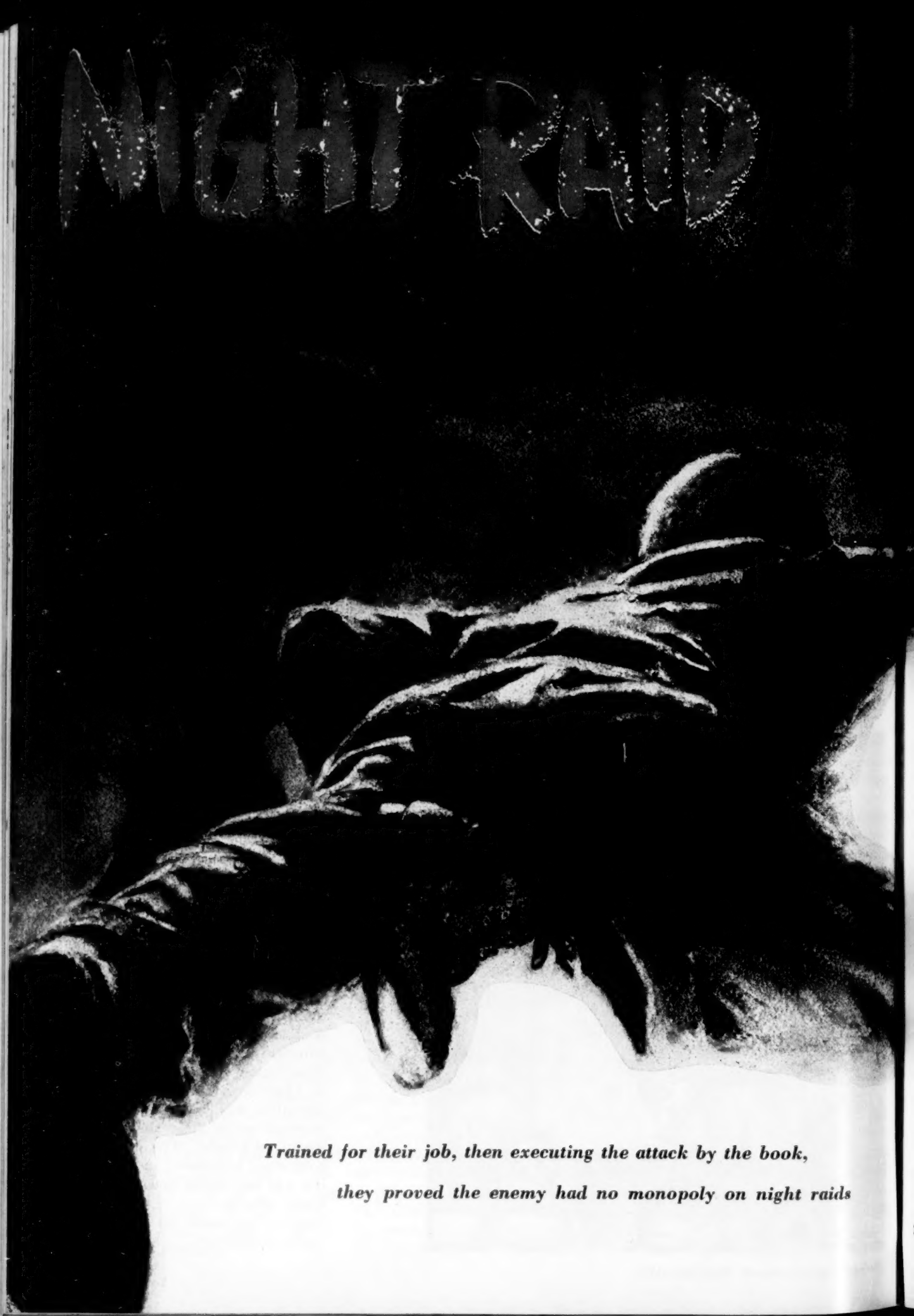
At noon on Saturday, a 21-gun salute echoed over the Virginia countryside as President Eisenhower received honors rendered by a provisional regiment of Marine Corps Schools personnel (below left).

Throughout, the long distance wires between Quantico and Washington were kept busy with the Chief Executive remaining in constant touch with the Capitol. The Korean truce signing was imminent and everyone settled down to "sweat it out."

Shortly before President Eisenhower was scheduled to return to Washington, it was announced that he would remain at Quantico another night. Then, in the early Sunday morning hours, word was flashed to the temporary White House at General Cates' quarters that the armistice would be signed at 9 p.m., Quantico time, that night.

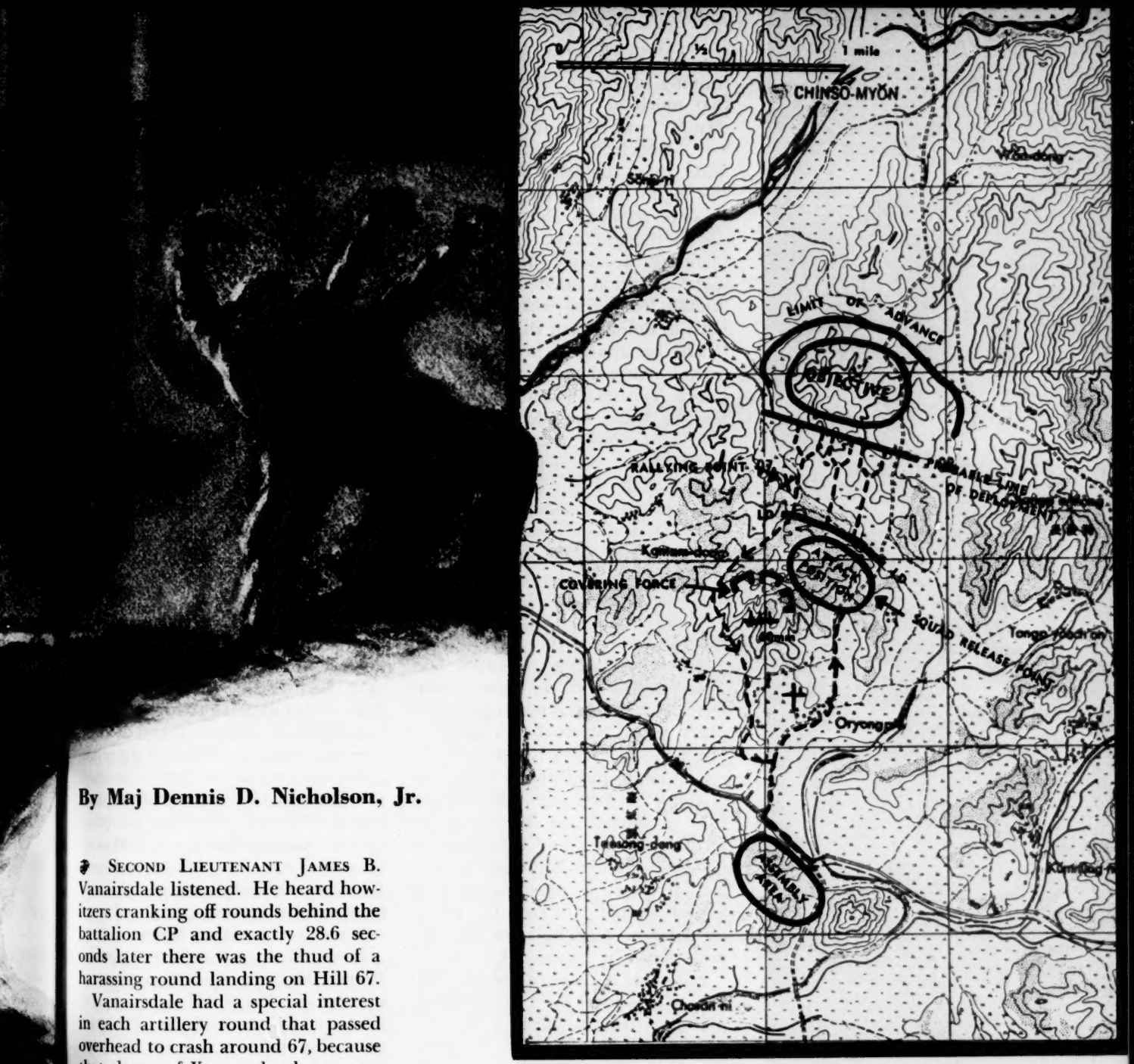
Sunday morning, the President attended church services at the air station chapel. A final luncheon for the conference members followed. And less than eight hours after his automotive caravan turned toward Washington at the Iwo Jima statue at Quantico's entrance, the Chief Executive was broadcasting an announcement of the cease-fire to the American people. The momentous conference was ended, another shooting war had cooled down, and MCS began another week of training personnel who would be our nation's "force-in-readiness." USMC

NIGHT RAID



Trained for their job, then executing the attack by the book,

they proved the enemy had no monopoly on night raids



By Maj Dennis D. Nicholson, Jr.

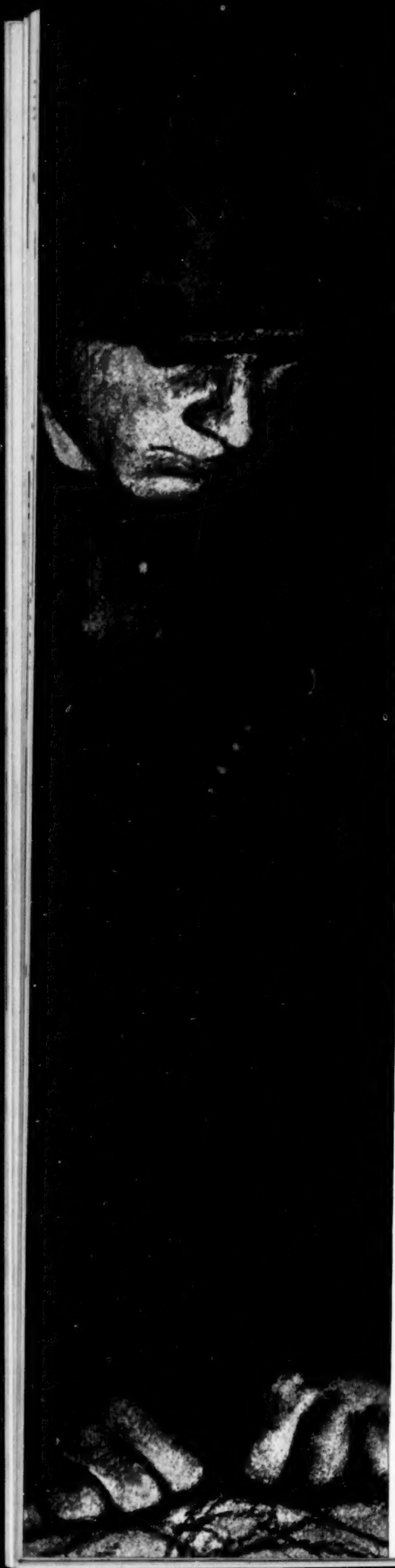
SECOND LIEUTENANT JAMES B. Vanairsdale listened. He heard howitzers cranking off rounds behind the battalion CP and exactly 28.6 seconds later there was the thud of a harassing round landing on Hill 67.

Vanairsdale had a special interest in each artillery round that passed overhead to crash around 67, because that clump of Korean landscape was to be raided some night soon, and the lieutenant had a feeling that his platoon would do it. Every platoon leader in the battalion wanted a crack at what would be the first night operation since the 7th Marines had returned to the line from division reserve.

Van knew about the harassing fire. It was part of the plan started two days earlier in preparation for the forthcoming raid. The idea was to make the enemy seek cover between 2300 and 0300. Hearing rounds rumble through the clear night air, Van thought, "I hope they get the enemy in the habit of buttoning up at this time every night."

Vanairsdale's platoon sergeant, SSgt Harvey Wright, was close by. The two discussed the harassing and interdiction artillery fire — Wright didn't think much of it. He longed to catch the enemy in the open and to annihilate him with cold deliberation. The sergeant was a fighter, a calm one. He was, in current Marine parlance, "hot to trot." The lieutenant felt good inside when he thought about Sergeant Wright. He knew the sergeant's enthusiasm for combat would affect the whole platoon and help carry it along to success. Eyeing the sergeant in the darkness, he thought, "Wright will want to take the point. Having him there will solve a lot of my problems."

Van thought on. He tried to picture the check list for night operations he'd studied in Basic School. It was refreshing to note how many items he remembered. He realized that they were easy to conjure up because each point had been reviewed and crystallized in his memory dur-



ing his platoon's intensive night training in reserve. He was pleased that much of what he had to remember was becoming second nature. But from somewhere in his mind there flashed a warning that this might be dangerous complacency, so he reviewed more deliberately. As he thought about the detailed planning necessary to make any night operation successful, he found himself wondering what the battalion was doing about this night raid.

The battalion S-3 heard the H&I fires leaving their howitzer tubes just as Vanairsdale had. He waited to hear them explode on Hill 67, then smiled and resumed work on his current pet project: the night raid on Hill 67.

"How about those stereo-pairs of 67, Jim?" the S-3 asked 1stLt James W. Brady, the S-2.

"Regiment thinks they'll be here day after tomorrow, Major. There's a photo mission being flown over the area in the morning."

As the second night's H&I fires were winging their way into enemy territory, the S-3 was making detailed plans. He'd spent hours studying Hill 67 from a friendly outpost 1,100 meters away, and through field glasses and a 20-power telescope had carefully examined the terrain as he formulated the plan. Previously he had merely been following a regimental directive, planning raids of various strengths to keep the enemy off balance. Now he knew how the raid would be conducted.

His study had convinced him that Hill 67 was ideal for a night raid in platoon strength. Back at the CP, he was searching his map for a similar piece of terrain to use as a rehearsal site when LtCol Noel E. Gregory, the battalion commander, walked into the operations bunker.

"Nick," he said, "give me a quick run-down on the plan for 67 that you mentioned at our staff conference last night."

The S-3 took out the acetate-covered map which contained his plan and briefed the colonel who directed a few changes, then said, "You've convinced me."

"However," the colonel added, "I want you to talk over the entire plan with the company commander and platoon leaders involved. Before I issue an order for the raid I want you to find out what those people think about it. Let me know what changes you recommend after you see Easy-Six. I agree with you that his company should execute the raid."

The S-3 thought that he had detected something tense in the "Old Man's" manner and knew he was right when the colonel came back into the bunker an hour later and said, "Nick, you'll have to get hot on the 67 deal. I want to hit it tomorrow night. Can we do it?"

"Yes, sir."

Then business picked up.

"Jim, do we get the photographs?"

"No, Major. Regimental Two says they can't possibly reach us in time."

"Well then, what's your latest estimate of enemy strength on 67?"

"Well, sir, we've thought right along that there were two enemy platoons up there. This was confirmed by a friendly agent last night, so it's still our estimate."

THE S-3 PICKED UP the phone on the operations phantom circuit and rang Easy's CP. "Hey, Mac! The news is that we have to hit 67 tomorrow night. It looks as if the colonel is going to approve most of the plan I discussed with you the other day. He agrees that your company should execute the raid. How's to get your raid people together for a 2100 conference at your CP? I'll be over and I'd like to talk with you, the platoon leader of the raiding party and anyone else you want to listen in."

Later, sitting alongside Captain Donald McGuire, the company commander, in Easy's CP bunker, the S-3 got down to business. "Gentlemen, this conference is for the purpose of getting your ideas and recommendations on a plan the battalion commander has tentatively approved for raiding Hill 67 tomorrow night. Interrupt me as I go along if you have a question or a recommendation. Colonel Gregory told me to make it clear that the entire battalion staff will be at your disposal if you need any help. Of course, it will be strictly Easy Company's show once the order is issued. The plan is to use one platoon to raid Hill 67 tomorrow night with the mission of destroying enemy, equipment and positions. As you know, it's estimated that two enemy platoons hold 67. Initially it will be an unsupported, non-illuminated night raid. We've

worked out a fire support plan with artillery and mortars that we'll use the minute the raiding force is discovered. One platoon reinforced on OP-2 will act as covering force to support the operation with small arms and machine gun fire and assist with evacuation.

"Captain McGuire, I suppose you're using the first platoon since Lieutenant Vanairsdale and Sergeant Wright are here."

"That's right, Major," Easy's CO replied. "Van has been out on OP-2 for several days, and he and all his people are familiar with the terrain around 67. I plan to let his platoon rest at OP-1 all day tomorrow while the fire team and squad leaders and the guide and platoon sergeant spend most of the day at OP-2 studying the terrain and their roles in the operation."

"Good! I'm sure the colonel will okay that."

"Major," Captain McGuire asked, "What about rehearsal? Since nothing has been said about it, I suppose we won't have one."

"That's right, unless you want to recommend a change. We're banking on an extremely detailed reconnaissance to turn the trick. What do you think?"

"Well, sir, I'll go along with that. I think the reconnaissance will be more valuable in this particular instance, especially since it's important that the men be rested. But normally I'd favor the rehearsal."

"You're right. We should have both, as required by the battalion SOP for night raids. However, this is one instance when we'll do as the schools say and use the book only as a guide. As you'll see, though, everything else about this raid is right by the book.

"Mac," the S-3 continued, "I need to know whether you'd rather have Vanairsdale go all the way to the objective in complete darkness or in moonlight. I talked with the S-2 just before I left the CP and he tells me you'll have a quarter-phase moonrise at 0102 tomorrow night."

"I've already discussed that with Van, Major. In spite of the extra carrots you managed to get us fed while we were in reserve, Van claims that all through the training he found that he could operate much better with just a little light."

"All right. I think the colonel will approve a recommendation that the assault be made in moonlight. If he does, Van will cross the line of departure at 0045. That will put him near the objective when the moon rises.

"I have the plan here in grease pencil on my map board.* Let's make sure we all agree on what recommendations should be made to the colonel. You know he likes his orders to represent the best ideas of several subordinates as well as his own. Van will keep his platoon here in an assembly area all day while the leaders are on OP-2. He'll leave the assembly area at 2330. This is the indicated route to the attack position here. This road is the line of departure. The squad release point will be in the vicinity of the line of departure. Here's the objective and this line marks the limit of advance. This 'X' indicates the rallying point which is on the route of withdrawal. Maximum stealth and caution will be used until discovered. We must be sure that no man says a word. If anyone runs into wire, for example, all the other men can sense it by watching, and there's no necessity for passing back any warnings. Do you think we can get that idea across, Captain?"

"Yes, sir. Sergeant Wright claims that his people found in their night training that word-passing was generally unnecessary."

"Mac, what platoon do you plan to put on OP-2 in place of the first platoon?" the S-3 inquired.

"I'd like to attach a section of heavies to Lieutenant Skaugen's antitank assault platoon, which is already attached to my company, and let it act as covering force. That will give me a lot of people on OP-2, but you never can tell when the Chinese will try to knock us off that spot. Following the evacuation plan, I'll have an assault section standing by to rescue any wounded after the attack."

"Okay, Mac. That sounds good," the S-3 agreed. "The extra artillery FO we're making available will be with the covering force on OP-2. You should make sure that Van and Skaugen coordinate everything with each other. The antitank assault platoon will have quite an influence on the success of the operation. That's especially true in view of the extensive small arms and automatic weapons fire which the covering force will deliver once the raiding force is discovered.

"Van will take a sound-powered telephone with him and Skaugen will string wire from his OP-2 position down to where Van's wireman can pick it up as he passes OP-2 tomorrow night. Van will have an SCR-300 on the battalion tactical net.

"Skaugen's demo people will prepare a 12-second fused charge for each man in the raiding party. The charges will be used to destroy enemy bunkers and equipment.

"Once the mission is accomplished, the withdrawal should be executed quickly, with a head count at the rallying point."

Lieutenant Vanairsdale interrupted to ask, "What's the mine situation in the area, sir?"

"We have checked all our mine overlays in the S-2 office and there

*Ed: See map, page 29.

are no mines plotted in the area you'll be passing."

Captain McGuire wanted to know what pyrotechnic signals were authorized.

"I checked with the comm officer earlier and we are tentatively authorized to use white star clusters and green star parachutes," the S-3 told him. "However, higher authority will have to approve this variation from the SOI. My recommendation is that we use a white star cluster to coordinate the assault, a green star parachute to signal withdrawal and a second white star cluster to call supporting fires. Would such a code be all right with you, Mac?"

"Yes, sir. However, I hope Van won't have to use the signal for assault. If he has not been detected when in position to assault and if he has the control I'm hoping for, I want him to signal the assault with an arm and hand signal."

"That's a good idea, Mac," the major agreed. "There's no need to let a pyrotechnic signal telegraph that we're coming when we might get all the way without alerting the enemy. I can't overemphasize the importance of stealth in this operation. Of course, we're going to have it planned well enough that the odds will be with us even if we're discovered. Remember that we know where the enemy is on 67, whereas he won't know exactly what we're up to. The battalion we relieved in this sector conducted no night operations. That means the Chinese won't be expecting us. As a matter of fact, the enemy doesn't expect UN forces to conduct anything except minor reconnaissance patrols at night. If we can catch the enemy flatfooted, we can hit him hard and pull out before he knows what's going on."

The S-3 paused while Captain McGuire considered a telephone call from one of his front line platoons that had heard enemy movement to its front. Then the major continued, "All hands should travel light. However, the colonel wants everyone to wear armored vests. They will do a great deal to reduce mental stress. Men are more likely to be 'shook' at night, but I don't think you need to worry about that aggressive crew of yours. Mac, do you think you could get by without canteens, cartridge belts, and bayonet scabbards?

"Yes, sir. We should fix bayonets in the attack position so we won't need scabbards. In order to travel as light as possible, I'll replace all 1st Platoon BARs with M1s, carbines or the five Tommy guns we have in the company. The covering force can make good use of the extra automatic weapons, too."

"Well, gentlemen, I'd like to hurry through these few points before I head back to the CP. We'll have a battalion forward aid station set up at OP-2 in the big bunker out there. Use your usual night identification means for all individuals, as stated in the battalion SOP; I brought up two miles of wire on speedreels and two sound-powered telephones in my jeep; the supply officer is also sending you 200 extra 60mm rounds for Lieutenant Arnspiger's section that will be in the covering force. If everyone understands the plan, I'll firm up our discussions in order form later tonight for the colonel's approval and deliver the order to you with an overlay tomorrow."

When the S-3 returned to his CP a combat outpost was surrounded by enemy, and the operations bunker was alive with activity. An hour later, after artillery had boxed-in the outpost, all was quiet and the S-3 drafted the night raid order following the check list in FM 7-20. At the same time the assistant S-3, 1st Lt Guenther W. Lenffer, filling a vital billet not authorized by the T/O, was drawing up an overlay from the grease pencil lines on the S-3's small map board. The lieutenant was careful to draw the major's sketch along the lines of Figure 17 of FM 7-20.

At 1300 N-night (a term the battalion applied to raid nights), the S-3 presented his recommendations, which included those of the company commander, to the battalion commander in the form of a smooth order, written in message form with an attached overlay. The colonel, after carefully considering each point and asking a few questions, signed the order. A special message center runner took the order to Easy-Six who checked it carefully and was relieved to find that there was no change from the preliminary instructions he'd already issued.

EASY-SIX TOOK THE order to the OP where Lieutenants Vanairsdale and Carl W. Skaugen were planning the details of the raid. The captain issued his final order and, after studying their notes, both platoon leaders were convinced that their plans were complete. Pointed answers to the company commander's questions convinced him that the lieutenants had planned well. He permitted himself only one more reminder.

"Van, I think you and Skaugen understand everything about our plan. I just want to emphasize once more that your people must use stealth. Talking should not be necessary after you give your final instructions in the assembly area. Be sure, too, that your men know they are to move extremely slow getting one foot quietly planted before lifting

the other. That's very important."

"Aye, aye, sir. We've been stressing the necessity for stealth throughout our reconnaissance with the squad and fire team leaders out here all day," Vanairsdale replied.

"Good luck," the captain said as he headed for the bunker from which he would act out his role in this pint-sized operation.

The operations chief's clock was secured to the wall of the operations bunker by a piece of comm wire. It showed 2330 when the telephone rang. The first platoon had departed the assembly area on schedule.

This was a small operation. It was also bold. As so often happens in a static defense, this little hassle was attracting a great deal of attention. The division commander had evidenced keen interest in it at his staff briefing, the regimental commander and his S-3 were at the regimental OP and the battalion commander and many members of his staff had gathered in the operations bunker to observe the show.

The little operation was dramatic. The enemy had been creeping over ground that had previously been friendly terrain. Large-scale operations to halt the creeping had been none too successful. Besides, this operation was being conducted at night!

The night was black. Lieutenant Vanairsdale's platoon had walked from the assembly area to the covering force position four times previously. Still it was difficult to follow the route. Sergeant Wright, a man with keen eyes, was leading the column, according to plan.

The platoon was late passing through the covering force position. The pitch-black night had slowed its rate of march. An ominous bank of clouds covered the moonrise. Vanairsdale would have to attack without moonlight, but as black as it was, he realized that he and his men were slowly gaining night vision. He knew that his time schedule was off and comforted himself with the thought that stealth, not timing, was the key to his plan.

At the line of departure and

squad release point, Vanairsdale decided not to release his squads. He continued moving in column. It was the only way to maintain control in that murky blackness.

When the column approached a road, which showed as a trail on the map, Wright signalled the column to a halt. The platoon quietly settled down on its haunches while Wright examined the road. He found nuisance mines all over the road and the straw in his hand telegraphed back the delicate touch of a trip wire at the road's edge. Wright eased off to the left. Finally he found a spot where the road appeared to be clear.

The sergeant jerked the vest of the man behind him to signal him forward. The platoon crossed the road without being detected.

Once again Wright halted the column — he'd observed two enemy moving to his right. They were too far away to kill with silent weapons and shooting them would alert the enemy on Hill 67. The platoon members kept their heads down and held their breath, intermittently, until they were signalled forward again. Then they resumed their stealthy approach to the objective.

Lieutenant Vanairsdale, who was moving in the center of the column with his second squad, could sense that his men were concentrating on one thing above all. They were making every effort to move silently. Wright was no exception. As he moved slowly, cautiously, quietly forward he encountered enemy wire. The first squad leader was immediately behind him. Together they cut through two double aprons and a single strand, careful to muffle the sound of their wire cutters. As the platoon passed through the breached wire, several men noted that it wasn't a good job of wire-laying.

At 0305, squads had been released and the platoon had eased itself down into an enemy trench, six feet deep and three feet wide. Entrances to enemy living bunkers were dug near the bottom. They were about three feet in diameter.

MEN OF THE 1ST Platoon felt a slight relief. They had gained the enemy position without being detected. They knew, though, that a first-class fight was near.

Vanairsdale, in the center of the enemy position now, found time to be thankful that he hadn't yet had to use a pyrotechnic signal for the assault. That would have tipped his hand prematurely.

Wright could hear enemy talking in the bunkers along the trench sides. There was a pause in their conversation. The enemy had heard the first platoon. The chatter resumed. Wright, as he pulled the pin on his first grenade, imagined that the enemy was asking, "Who's there?"

As Wright's grenade went into the hole, an enemy head thrust itself outward and exclaimed, "Marines!" That was the last word spoken by that Communist. He and his bunkermate were dead the next instant, as Wright's grenade completely filled the hole with deadly fragments.

Then Vanairsdale fired a white star cluster to signal the assault.

Hill 67 came alive with activity. Enemy came pouring out of bunkers rubbing their eyes, some of them even unarmed and stumbling around dazed and half-asleep. They were caught flatfooted. The cardinal sin had been committed; they were surprised! The first platoon had a field day. Grenades and demolition charges sailed into enemy bunkers. Bayonets found their marks. Carbines, M1s and tommy guns left enemy rolling in the dirt.

Artillery was falling in a prearranged pattern around Hill 67, seconds after Wright's grenade exploded. The little battlefield was nicely isolated.

Thirty-one minutes after Marines entered trenches on Hill 67, the enemy began showing some signs of realizing that at last he'd been hit at night.

Enemy machine guns and mortars began firing on the objective from long ranges, but a spectacular friendly artillery mission knocked out the nearest enemy machine gun with what the covering force thought was the first salvo.

By 0345 it was getting lighter. The FO with the covering force spotted an estimated 30 enemy moving to reinforce Hill 67. They were clobbered. Not one of the group ever reached his destination.

By this time the enemy had finally succeeded in getting a few burp guns going on the north side of the hill. In knocking out the burp guns the platoon sustained its first and only

casualties. No one was killed, few were wounded, but the enemy losses were high. As he assured himself that the casualties were being attended to, Vanairsdale surveyed the area and noticed enemy dead everywhere. He was pleased to see that demolition charges had caused the deep bunkers to cave in.

Members of his platoon were moving through the position with no enemy left to shoot and no bunkers remaining to destroy. Twenty-five enemy had been encountered on Hill 67, and 12 enemy dead and 13 wounded were counted. Few, if any, of the wounded would live. In addition, supporting arms had destroyed three active machine guns, five mortars and 50 personnel. With the mission accomplished, Vanairsdale decided to withdraw before the enemy recovered. His green star parachute burst overhead.

As the first platoon headed home, enemy mortar fire began getting thicker and hitting right along the route of withdrawal. The platoon moved forward down an old trench for protection from bursting mortar rounds, quickly mustering at the rallying point. A white star cluster fired from the M-1 of Vanairsdale's runner brought in the pleasant sound of friendly heavy machine guns covering the withdrawal.

Artillery and Lieutenant Samuel D. Arnspiger's 60mms did their counter-battery stuff according to plan, and the enemy mortars were silenced.

History is the great teacher and this time was no exception. In order to assure that the lessons of Hill 67 were not overlooked, the S-3 very carefully "debriefed" Lieutenant Vanairsdale and Sergeant Wright immediately after the raiding party returned to friendly lines.

When the lieutenant had supplied enough information to satisfy regiment's demand for an immediate report on the raid, the S-3 asked, "Van, what did you and your people learn from last night's operation?"

"One thing is certain, Major. Success on Hill 67 increased the men's confidence in their ability to fight at night. I heard the men talking as we trucked them back to the battalion CP for chow and showers. They're all hot to go now—even hotter than they were last night. They are convinced that night training such as we had while in reserve is tops."

"That's good to hear, Van. What else do you think we can chalk up under 'Lessons Learned?'"

"FRANKLY, SIR, the lessons learned were many. However, they merely confirm principles which have been in the book for a long time. I think we merely proved last night that Marines who have the training and follow the book are as good, or better, night-fighters than any Oriental army. I can't tell you how proud I was of the way my men fought and conducted themselves last night. No one could have done better night fighting.

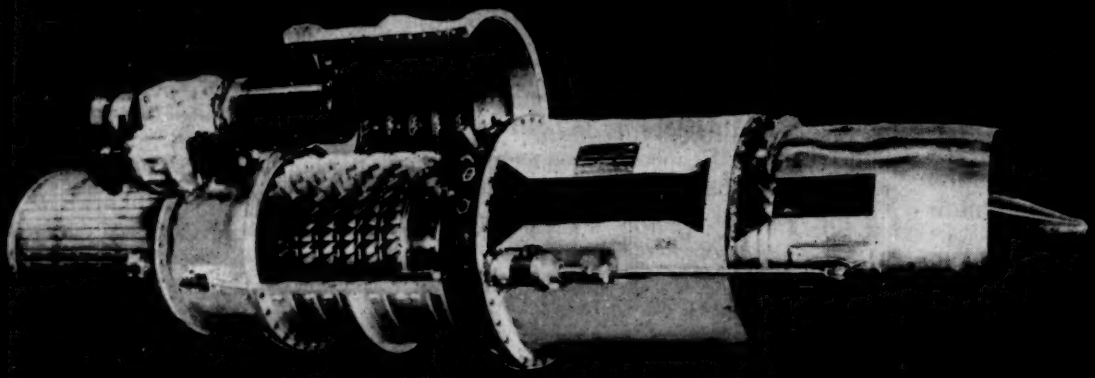
"Personally, I was amazed at the control I was able to exercise considering we had to contend with that darkness when the moon didn't show as scheduled. From now on I'll favor night operations every time whether there is a moon or not."

"Sergeant Wright, do you want to add anything to what the lieutenant has said?"

"I'd just like to sum up my ideas on the Hill 67 business, sir, by saying that I believe that any Marine unit which trains properly and then puts the training into practice by planning in detail, can execute a night operation—just as we did last night—with a much better chance for success at night than in daylight. I think that is especially true when the enemy is as good with his supporting arms as the Chinese are in daylight."

THE S-3 OBSERVED the truth of the old adage: Nothing succeeds like success. Throughout the battalion there was evidence of a new preference for night operations over those during the day.

Shortly after N-night for Hill 67, the S-3 interviewed volunteers from all battalion units for a special raider squad being organized to engage in dangerous missions behind enemy lines. He noted that most of his volunteers were from the first platoon of Easy. All these men stated that after their success on Hill 67 they wanted to get into a unit where they could do that sort of work all the time. Each man was obviously sold on his ability to operate safely at night even when going deep into the enemy's position. When it came to fighting in darkness, these men had seen the light. USMC



YOU'RE MOVING THE WORLD

By Annesta R. Gardner

WHETHER YOU FLY THE LATEST model interceptor, do your "piloting" in a tank or just trundle a little old jeep, you're moving the world—pieces of it, anyway.

Into every one of those vehicles go materials from every corner of the earth: tungsten from Korea, cadmium from Japan, cobalt from Canada and Cuba, columbium from the Congo, manganese from Morocco and many others.

It has been estimated that 65 percent of the materials in a modern jet engine are imported—and they are strategic materials, vital to the operation of that engine.

These facts pose a tremendous problem for military planners. It is important for Marines to understand this, because such conditions often determine where the Corps may be sent and what it will do upon arrival. The need to protect our sources of supply for vital materials exists today, as does the necessity for maintaining open sea lanes to make certain the materials reach our production centers.

At the present time, 75 materials are listed as "strategic" by the Munitions Board. All are deemed vital for defense, and none are available within the continental United States in quantities sufficient to support a global war effort for a reasonable length of time. All are being stockpiled so that we will have at least a small cushion if such a war breaks out.

Among the 75 materials are metals, minerals and agricultural products. Some are scarcer than others; of some we produce at least a portion of our needs. Asbestos is stockpiled because it is still unequalled in providing insulation and fire resistance at relatively low cost. Silk is on the list because no other material is as satisfactory for powder bags. Natural rubber is included because, despite great progress in synthetic rubber, the natural material is still superior for carcasses of heavy-duty tires (aircraft, particularly).

Let's take a closer look at half a dozen of these strategic materials to see what they do and where they come from. The metals mentioned at the beginning of this article form a good group for discussion and illustrate many of the problems we face in regard to all of the materials on the stockpile list.

Cobalt, columbium, chromium and manganese are called "additive metals" because one of their prime functions is adding important qualities to steel.

Cobalt is one of the most heat-resistant metals. It has been used a great deal in making jet engine blades and other parts that must combine strength and heat resistance. It also plays a very important part in the permanent magnets that are so essential for electronic equipment.

Chromium is one of the metals that makes steel "stainless." It, too, is heat-resistant and corrosion-resistant as well. It is often used as a protective coating for steel and other metals—the familiar "chrome plate."

Columbium, though not well-known, has been vital in aircraft production. It's used in jet engine alloys and is added to stainless steel to improve its weldability.

MANGANESE is a toughener for steel. It's used in almost all carbon steels and is particularly important in production of armor plate and of castings that are destined for very rough service.

Tungsten forms an extremely hard compound called tungsten carbide. It is used on armor-piercing projectiles and to make tool bits for cutting metal—tool bits which have frequently been given a large share of the credit for our remarkably rapid production of war material in World War II. Tungsten also goes into filaments for electric lamps and into many types of electronic equipment.

Cadmium's main job is preventing corrosion. About 65 percent of what

Over long supply lines stretching around the globe come the scarce and vital materials necessary for military production

we use goes into electroplated coatings for steel and other metals. It's used on thousands of aircraft parts, in ordnance equipment and practically every type of military material. It's not the only metal that might be chosen for this purpose, but it has the great advantage of depositing uniformly on even intricately-shaped objects, and only a thin coating is needed to provide good corrosion resistance. The remaining 35 percent of our total consumption goes into bearing metals, solders, pigments, photographic chemicals and a wide variety of minor applications.

So much for what these metals do. The next thing is where they come from.

All six are natural elements, found in ore deposits scattered across the face of the earth. None is particularly abundant. The location of the best deposits is pretty much an accident of nature. In these cases, nature has not been too good to us. Known high-quality ore deposits in the U. S. were never very large, and over the years—particularly during World War II—we used up most of what we had. Today, in respect to most of these metals, we are definitely a "have-not" nation.

Unfortunately, as our supplies have decreased, our needs have risen. As military specifications are tightened and equipment is expected to last longer under tougher conditions, we need more and more of these additive and protective metals. The jet engine, for instance, with its high operating temperature and high rotating speed requires tremendous amounts of cobalt and chromium and uses a good deal of tungsten, manganese, cadmium and columbium, too.

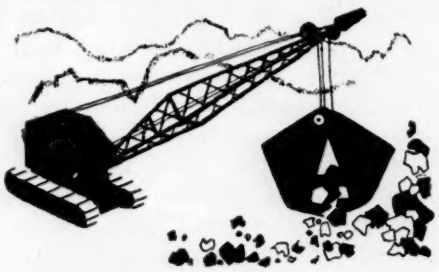
These facts—our greatly increased needs and nearly-exhausted supplies—help explain why our position in regard to strategic materials is even more serious today than it was during World War II. A third, and very important, factor is the re-alignment of world powers that has taken place since the last war.

Russia has the world's largest deposits of manganese ore and has a generous supply of chrome. In 1950, for example, it produced about one-third of the total world output of manganese and about one-quarter of the chrome. We, on the other hand, produce only a few percent of the chrome (our total known reserves of high-grade ore are not enough to last two months at present rate of consumption) and less than 10 percent of the manganese we need. At one time, Russia was our largest supplier of both materials. Since the Korean war, we have received little more than a trickle.

China accounts for more than a quarter of the world's tungsten production and is believed to have as much as 90 percent of the total world reserves of tungsten ores. It was, before the Korean war, our largest supplier of this metal.

With these two countries practically out of the picture, our position looked for a while very dark indeed, but remarkable progress has been made in developing new sources.

Today, we get chrome ore from Turkey, the Union of South Africa, Southern Rhodesia, the Philippines and New Caledonia. Manganese is coming from India, Africa, Brazil and Cuba. Tungsten shipments arrive from Bolivia, Portugal, Spain, Brazil and Korea.



Most of the world's cobalt is on our side of the Iron Curtain—the Belgian Congo is the world's largest producer. Canada, French Morocco, Northern Rhodesia and the U. S. supply five to 10 percent. The trouble is that our appetite for this heat-resistant metal is so voracious that supply simply can't keep up with demand. Cobalt is on the most-critical list and is likely to stay there. The only immediate solution seems to be to draw in our belt by conserving supplies and seeking substitutes.

Columbium is the scarcest of all these metals. No country has very much of it, and we have almost none at all. It's generally recovered as a by-product of tin mining. At present, a large amount of our supply comes from Nigeria, with other tin mining countries like Brazil and the Belgian Congo also supplying some. Since columbium has been regarded as essential for safe welding of stainless steel, its scarcity has been a major headache. Recently, though, a few aircraft companies have reported good results with steels containing titanium instead of columbium, so we may be headed out of the woods at last.

Our cadmium situation is much more encouraging. During World War II about half of what we used was imported, mostly from Mexico. By 1950 we were producing two-thirds of our own needs and getting the rest from a variety of sources, among them Canada, Japan, Belgium and the Netherlands. Even without a global war, though, we'll probably need a lot more of this metal in the future. The President's Materials Policy Commission, a group set up to study our present and future needs for materials, estimates that at least 75 percent of our requirements will have to be imported by 1975.

Well, what are we doing about all of this?

As indicated above, we are building a stockpile of these scarce and critical materials. We are hunting for new ore deposits—not only in the U. S., but in all the countries of the free world. We are helping many of these countries to develop known ore supplies and to build the roads and refineries needed to get the metal out.

We're also hard at work on new recovery methods which will make it practical to use lower-grade ores and take advantage of deposits which cannot now economically be tapped.

We're paying plenty of attention to conservation, too. For example, several jet engine makers have developed "strategic materials indices" that help them measure the effect of design changes on the amount of critical material used. Sometimes, by making parts a little thicker, they can reduce the amount of manganese needed to toughen them. In other cases, by using an alloy containing a little more cobalt, they can make a part considerably thinner and achieve an over-all saving.

But perhaps our most important and far-reaching effort is in the development of substitute materials—materials which are found in quantity in the U. S. and which can take the place of imported ones.

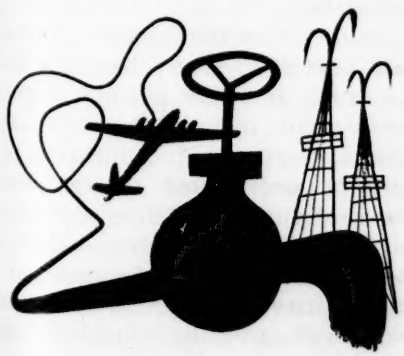
One such material is titanium, a metal about which you'll be hearing a great deal in years to come.

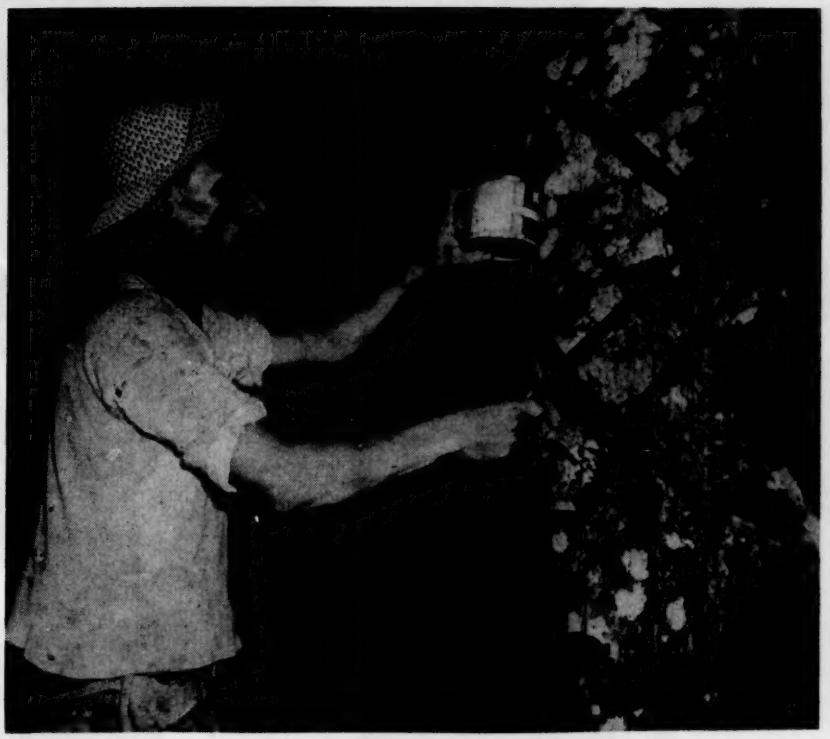
Lighter in weight than steel, titanium has a corrosion resistance rivaling that of chromium-containing stainless steel. It's very strong and encouragingly abundant—the fourth most common of all metals. It also has the important advantage of offering somewhat greater heat resistance than aluminum. This, plus its light weight, has spurred its use in airframe construction. The high operating temperatures of today's jet engines result in heating of the wings in the nacelle area to the point where aluminum just can't take it.

For a while, it looked as though stainless steel would have to be used in wing construction. That would mean not only an increase in weight but also a very large increase in consumption of strategic materials. Now, it looks as though titanium may save the day. Experimental airframe construction has been in progress for two or three years, and the first production use of titanium is getting under way.

The story of titanium is, incidentally, an interesting one. The metal has been known for a long time, but unless it is in very pure form it's extremely brittle. The only method available for obtaining high-purity metal was difficult and costly. A pound of titanium cost almost $200. Then, the Bureau of Mines, sparked by our need for substitute materials, developed a new production process. Today, a pound of titanium varies in price from five to 20 dollars, and there is every reason to expect that it will be even cheaper a few years from now. Even at present prices, the weight savings it makes possible do a lot to make up for its high initial cost in airframe construction.

As the price comes down, titanium will probably move in on the marine field, for hardware, boiler equipment and the like (the metal's resistance to salt water is outstanding), for ordnance equipment (mortar base plates, for instance) and for other materiel required to be strong, yet light in weight.





Wide World

Natural rubber is on our stockpile list

ANOTHER NEW material that bypasses a strategic metal is bismanol, a permanent-magnet material developed by the Naval Ordnance Laboratory. While it's still too new and costly for widespread use, NOL hopes that it will eventually be able to replace some of our high-cobalt magnet alloys.

One of bismanol's first applications, incidentally, is in an airborne magnetometer which is used to hunt for new ore deposits. The search by air with this new instrument is said to be many times faster and considerably less expensive than older ground-level exploration methods.

Thus, the list of available substitutes—some even better than the originals—is growing. But we are still dependent on long and tenuous supply lines. We must still stockpile materials, and we must keep these supply lines open.

Finally, what can you yourself do about all this?

Of course, you are helping to guard those supply lines. But you'll do a better job if you know *why* they are being guarded.

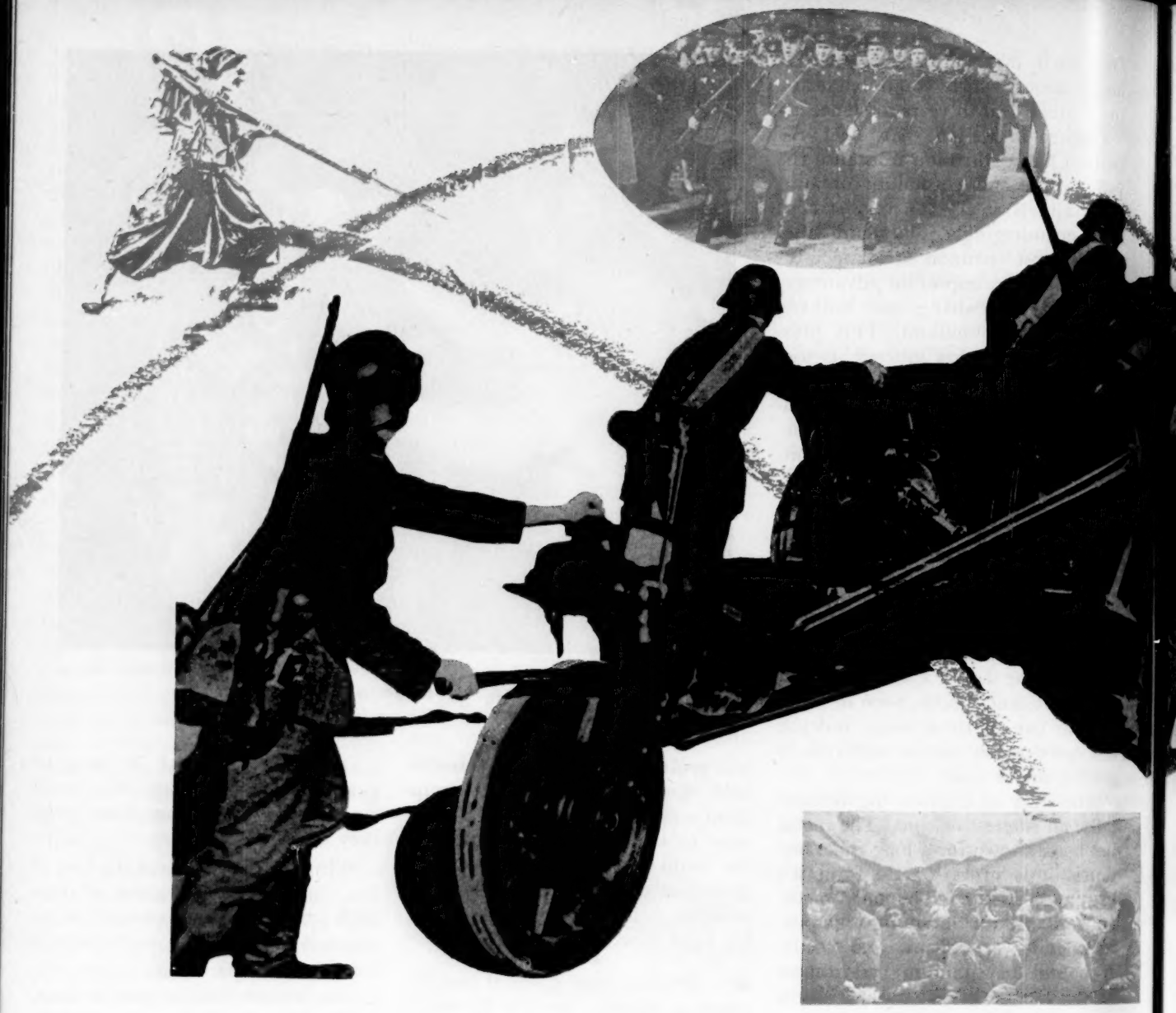
Why, for instance, was the loss of hot, humid, disease-ridden Malaya such a tragedy in the last war? What makes Singapore such an important base?

The answer lies, in part at least, in the fact that Malaya, guarded by Singapore, has the world's largest deposits of tin and is a major producer of natural rubber. And both are extremely important strategic materials.

Why are the French fighting so desperately in Indo-China today? There are political reasons, of course, but the country is also a major producer of natural rubber and has several other strategic materials. Right now, rubber is coming out—literally at gun point—from the battle areas themselves.

The free world must plan ahead in order to produce essential materials. The locales where the vital materials are to be found must be protected; the routes by which they reach the industrial centers must be kept open. You're moving the world. And you need the world if you are to move.

USMC



IT IS A FAVORITE GIBE OF THE armchair critic that, in the intervals between wars, a country's military leaders invariably busy themselves preparing to fight the *last* campaign rather than the next.

It never seems to occur to these club-window know-it-alls that it would be considerably easier for the responsible authorities to prepare for the next war if they possessed some reliable means of ascertaining with whom it was to be fought.

In most directorates of military operations there is, of course, a subsection whose sole responsibility it is to try and evaluate the war potential of every country with which a rupture might conceivably come about anywhere in the near future; basing their estimates on such restricted information as can be furnished by military attachés and such fragmentary intelligence as may reach them through agents of greater or lesser acumen and reliability. They may even attempt a rough classification of each individual nation, separating the sheep from the goats and categorizing them under the headings of "Probables," "Possibles" and "Improbables."

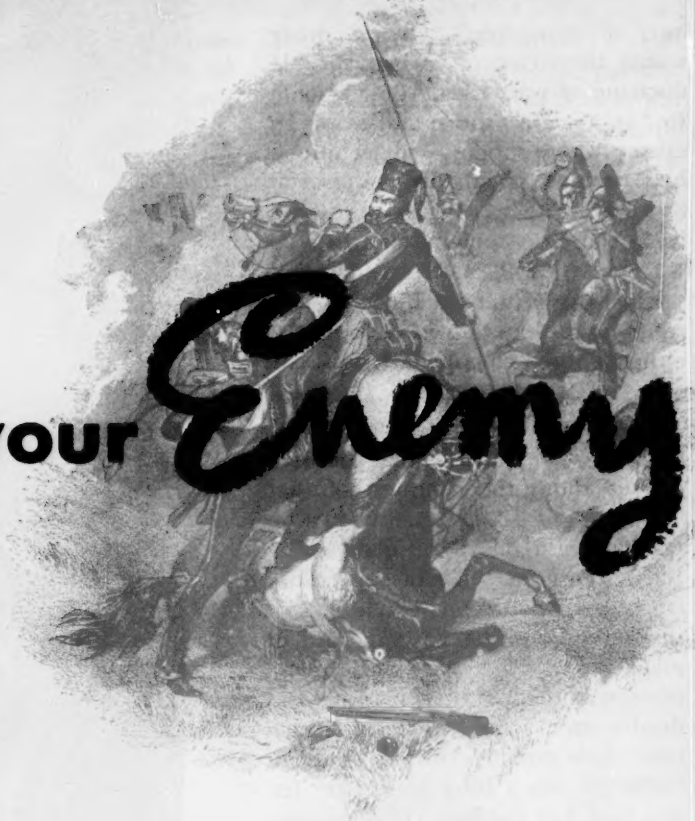
But speculation "by guess and by God," although interesting in itself and up to a certain point revealing, can rarely be anything but imprecise. For in most instances information, both political and military, is insufficient to support anything but the most vague supposition; the intangibles are too many and too varied, normally, to permit forecasting with any accuracy.

By Maj Reginald Hargreaves, M.C.

Intelligence may reach a country's war directorate, for example, of a "Probable's" acquisition of a new and potent weapon; there may even be reasonably reliable reports of the results of its trials. But the value of a new instrument of war can never be accurately assessed until it has been used against live targets. It remains, therefore, a menace whose magnitude can only be a matter of speculation.

Doubt as to the identity of the next most likely enemy; imprecise information as to the potency of the new weapons in a probable foe's possession; the possibilities inherent in hitherto unexploited tactical doctrines—for instance, Hitler's initially novel device of blitzkreig—all this not only helps to stunt forward-looking military thought but exerts its baneful effect on the actual training

Know your Enemy



'Warfare is very largely a matter of trying to guess what's on the other side of the hill; and one has to try and find out what one doesn't know by what one does.'

—1st Duke of Wellington

of troops. Once past the recruit stage, the soldier must be trained on a specific doctrine of war. In the absence of any solid grounds on which to found the precepts of future conflict, the tendency is to fall back on a dogma which actual contact with an enemy may speedily prove to be outmoded.

FACTORS AND considerations such as these, rather than an innate stubbornness, help to foster that conservatism in military thought that the know-it-alls delight to visit with their loftiest scorn.

How difficult it is to know your enemy in advance of meeting him in combat in the field, past history only too eloquently demonstrates.

On the eve of the Anglo-French campaign against the Russians of 1854-56, for example, "the first difficulty," as the Prince Consort somewhat tartly pointed out, "was the absence of all information as to the Crimea itself."[1] Or, it may be added, of the military resources at the enemy's disposal, the hazards involved in maintaining the lines of communication, or even the climatic conditions under which the war would be fought. Not surprisingly, the outcome was a botched and bungled business which reflected credit on no one but the unfortunate regimental officers and men who so stoically endured it.

AGAIN, IN 1870, the French approached their life and death struggle with the Germans with no better military doctrine than could be acquired by walling up Algerian tribesmen in their caves and suffocating them to death.[2] With a mobilization scheme which for sheer radiant lunacy resembled nothing so much as the moonstruck activities of the Mad Hatter's tea party, the French went on to confront the solid, perfectly disciplined and controlled German Army with a casualness and improvisation that would have been dangerous even against a rabble of wild Toureg horsemen. The outcome was Sedan.

"Look at him," cried the defending counsel at Bazaine's court martial on the charge of having treacherously surrendered the great fortress of Metz. "That man is no traitor,

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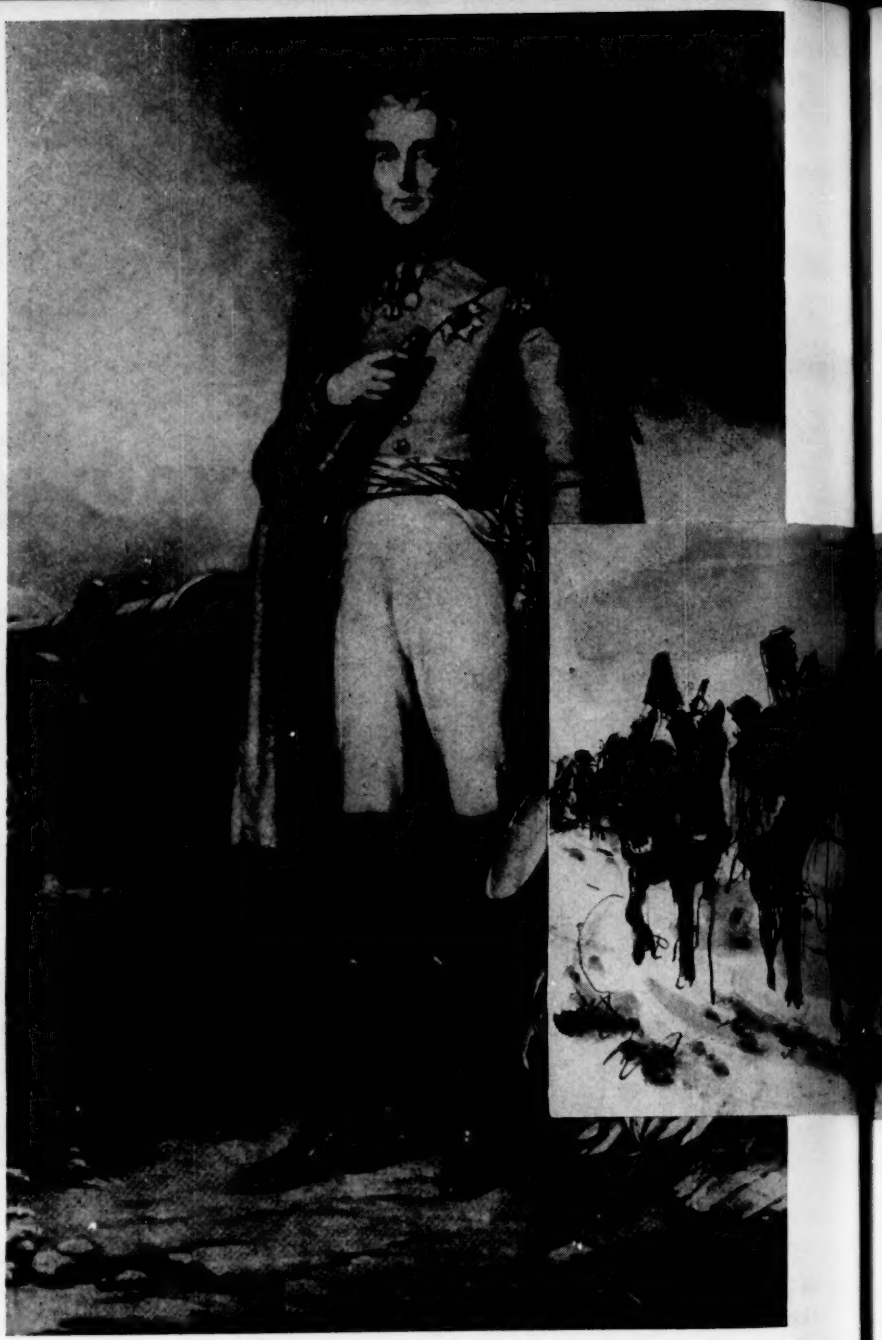
[1] The entire absence of maps, for example, was scarcely made good by a portfolio of Raffet's engravings showing a nice view of Yalta and a distant prospect of the coastline of Balaclava.

[2] A feat which the French general, Pélissier, owned up to with cheerfulness.

only a blunderer." Or, in other words, the victim of an inapplicable doctrine of war; the myopic unable to "appreciate" the qualities of an enemy whose modernized technique had been so vividly in evidence at Sadowa. The writing on the wall had been clear for any man to read who possessed the necessary wit correctly to interpret it. By "the Africans," as Moltke termed them, it was either ignored or hopelessly misread.

IT WAS WITH the same featherbrained inconsequence that the British set about the conquest of that "handful of Boer farmers" who raised the standard of defiance in 1899. With the sense of superiority engendered by decimating hordes of ill-armed Dervishes with the aid of magazine rifle fire, they had no conception of the mobility, resource and deadly marksmanship with which their new enemies would confront them. It was a long and bitter lesson, and, had the Boers possessed the ability to close with the adversaries they had already punished so severely with their rifle fire, it might well have been protracted even further. As it was, the British learned—the hard way—to know their enemy. Thereafter, a marked increase in mobility, a growing skill in musketry and the supreme ability of the khaki-clad rank and file to go in and clinch the business with the cold steel succeeded in achieving a hard-fought victory, which, with their infinitely superior resources, should have been in the Britishers' pocket from the first had they at the outset envisaged the particular sort of fighting to which they would find themselves committed.



Bettmann

The Duke of Wellington—fire, then the bayonet . . .

In August 1914, Britain was still the dupe of a brazen propaganda designed to impress the world with the infinite superiority of Gallic military thought. But actually, the French were still thinking in terms of 1870 —even to the extent of retaining the brilliant Third Empire red trousers of the *poilu*, a ridiculously gaudy attire which proved, in mass, a magnificent ranging point for field artillery and, in detail, a positive magnet for the machine guns with which the Germans had been careful to equip themselves.[3] Military doctrine was no less redolent of that irresponsible rashness and unbalanced opportunism for which the regime of "Napoleon the Little" had been so fatally characterized. Blindly disregarding the implications of the Schlieffen Plan—with whose fundamental concept informed military circles had been familiar for the best part of a decade — all energies were concentrated on an *attaque à outrance* which ignored the principal point of enemy impact and seemed to be carefully designed to leave the traditional road to Paris along the Oise Valley exposed and open to any hostile force with the enterprise and energy to avail themselves of it. The dogged fighting retreat of "the contemptible little British Army" on the vital left flank, plus Galliéni's instant exploitation of von Kluck's incredible hesitation and fumbling, served to obscure the deadly peril with which the wrong-headed doctrine adhered to by the *Conseil Supérieur de la Guerre* had threatened the whole outcome of the war.

But 1939 found French military thought even less attuned to waging war with those hereditary enemies

[3] The writer also recalls some amazingly bedizened Cuirassiers, glittering in brass helmets and steel breastplates, and the quotation wrung from one, "It's a beautiful uniform, but it isn't war, it's folly."

whose twice-exacted toll of their manhood had left them hopelessly debilitated, mentally, spiritually and physically. To a nation that recent conflict had bled white, the pernicious doctrine that, with its galaxy of modern rapid-fire weapons, the defense would always prove superior to the attack, made an appeal that was irresistible. The Maginot Line was the outcome of acceptance of this defeatist belief, and even that highly expensive last ditch of despair stopped short at the precise spot where it should have been strongest —opposite the Ardennes. But the French had reassured themselves that if, as they admitted, the Ardennes could not be pierced by Gallic troops, then they would prove equally impenetrable to the Germans. It is always dangerously foolish to judge other people's limitations by one's own; and it was through the "impenetrable" Ardennes that the Germans launched their blitzkreig, which—despite the ample lessons embodied in the campaign in Poland —the French endeavored to oppose, not by a flexible defense in depth, but by a mere linear defense, as inelastic as it was tenuous and halfhearted.

With not even the necessity to try and guess what was on the other side of the hill (Poland had rendered that plain for all to see[4]) the responsible French military authorities had made no smallest attempt to work out a technique which embodied a reasonable hope of defeating their enemies, and in due course they paid the inevitable penalty.

There is, of course, no fault to be found with the doctrine of line versus column *per se,* always providing that the former can be relied upon, with no looking over the shoulder, to produce the firepower that will wither the spearhead of the advance no matter with what impetus it has been launched, or the weight of its impact on arrival. But in 1940 that was precisely what linear defense failed to do.

That it could be done had been clearly demonstrated when Wellington took over command in Portugal in 1808. His "Poland" had been the disastrous campaign in the Netherlands of 1794-95, where, on his own admission, he had "at least learned how not to do it." Realizing that in no circumstances would his manpower resources ever equal those of the French, he had trained his infantry to meet column with line and by perfected volley-fire to blast the onslaught to a standstill. Lacking the weight, the impetus, the support and, withal, the resolution of a Hitlerian armored thrust, the Gallic columns were shattered at their head and "at their tail ravelled out like rope" and were speedily turned into a stream of flying fugitives. In effect, Wellington's battle-practice was based upon an extraordinarily shrewd appreciation not only of the particular attributes of his own troops, but of the peculiar qualities of the French. The British redcoat, as the Duke was fully aware, would stand and deliver a steady blaze of musketry until he received the order to "Cease fire." And good, stolid creature that he was, it was not his habit to keep glancing behind him. The French, on the other hand, once the ferocity of their first attack had failed to achieve results, were prone to waver and lose courage.[5] That was the moment to shatter them with another blast of fire and then go in and finish it with the bayonet. It was a schedule which consistently brought victory and was never more triumphantly vindicated than on the field of Waterloo.

. . . And victory at Waterloo

After the painting by Meissonier

In plain terms, Wellington knew his enemy.

In the situation which confronts the Western Nations' forces today, those responsible for the training, equipment and indoctrination of the troops are at least advantaged by a growing knowledge of the characteristics of the most probable major enemy—the Asiatic satellites by whom the first strokes in any general conflict will almost certainly be delivered. That much the memories

[4] General Gamelin was furnished with a full report of the blitzkreig in Poland, but threw it into a drawer unread.

[5] Or as W. Somerset Maugham has put it, "They can stand neither setback, hardship nor discomfort, and after a little while grow so careless that it is easy to take advantage of their unpreparedness."

of 1941-45 and the grim curtain-raiser of Korea have assured.

Over-riding all else is the salient fact that the forces deployed by the Communist world are armies of mass—and mass in such illimitable number as to make the hosts of Genghis Khan look like a mere corporal's guard. Equally important is it to realize that they are Easterners,[6] with all that implies in the way of hardiness, contempt for the sanctity of human life, great resourcefulness in finding shelter and subsistence, low mental development partially offset by a liberal endowment of native cunning and an ability to keep going without the elaborate organizational system demanded by Westerners to maintain an army in being.

IN THE MATTER of logistics—that intricate pattern of transport and supply on which the edifice of a Western army is erected—it is highly significant to note the complete failure which attended the efforts of Field Marshal von Paulus to reduce the happy-go-lucky manner in which the Russians sustain themselves in the field to some recognizable organized design. For it embodies a remarkably convincing warning, since the salient fact emerged that the breakdown in his carefully regulated supply system, which Russian lack of punctuality and precision had occasioned, in no way affected the troops' ability to "keep on keeping on." Equally clearly, they preferred it that way.

Long years of living at free quarter off a native or "liberated" countryside had fostered contempt for the red tape of a normally regulated supply system, as it had engendered a habit of improvisation, hardly distinguishable from plain marauding, which the vast mass of the rank and file found far too congenial willingly to abandon. Conformation with what the troops regarded as preposterously rigid and academic orders was a thing the higher authorities found it impossible to impose.

For by Western standards, Russian discipline combines the most outrageous insubordination with an occasional servility which is truly Oriental. Battle discipline is a thing apart and is a compound of fanaticism, kept at high pressure by an acute dread of the consequences likely to be visited on the shirker, barbaric love of destruction for its own sake and the Asiatic's traditional, fatalistic contempt of death. These are sources of inspiration that cease to function during the ordinary daily routine and are not replaced by that fundamental discipline — that discipline from within — which distinguishes an army from a mere banditti. A marshal or high-ranking general, for example, will be treated with a reverence, awe and instant obedience such as a medieval Caliph exacted from his slaves. But, off the actual field of battle, regimental officers command no more than capricious compliance with their orders; while subalterns and NCOs often go in very lively fear of the men over whom they have been set in authority. With this undisguised want of respect for rank goes an almost infantile vanity. With strangers upon whose ignorance they think they can impose, it is rare, for instance, for a second lieutenant to own to any rank less than that of captain; while according to his own account no conscripted soldier has ever been anything less in civil life than a factory manager, a singer at the opera or an engineer. If such assurances were to be taken at their face value, one would be driven to the conclusion that Russia is a land entirely without a peasantry!

Since the 1942 statute abolishing regimental political commissars, the discipline which holds the Red Army together is the "ideological" discipline imposed by the political administration at the various commands, with the aid of their network of informers distributed through the

Hargreaves

". . . what's on the other side of the hill"

[6] "Now *we* shall understand each other," was Stalin's greeting to the Japanese Ambassador; "we are both Asiatics."

ranks. It is a discipline of fear, but nonetheless real and stern for that. For the penalties awaiting the deviationist and the backslider are the forced labor gang or one of those *battaillons disciplinaire,* such as Napoleon instituted for those who sought to evade the draft,[7] and t whose worst features the men of Kremlin have added a harshness brutality all their own.

YET THE ORDINARY Russian soldier seems quite content on his miserable pay of 30 rubles a month—about the price of eight packs of cigarettes—buoyed up as he is with the fabulous belief that his is the only way of life that matters. It is true that the Muscovite fighting man seems to work best when organized in guerrilla bands from which all the weaker vessels have been ruthlessly eliminated. Certainly the "extermination battalions"—consisting of some 200 to 250 men armed with every possible type of infantry weapon—that operated behind the German lines after their swift initial advance over enemy soil, formed a formidable element athwart highly vulnerable arteries of supply and constituted a persistent source of embarrassment. "Their effectiveness," H. T. Paget has written in his book on Manstein, "depended on their ignoring the recognized rules of war." And ignore them they did with a thoroughness hitherto unparalleled since the days of Ghengis Khan. In any major war of the future that element is bound to reassert itself, working in conjunction with saboteurs planted well before the outbreak of hostilities; and plans to deal with this ferocious form of hostile activity demand careful and concentrated attention.[8]

With the organized forces, the grave want of fundamental, as apart from political, discipline is particularly to be observed in their handling of armor and all forms of mechanized transport. Basically, the Russians make excellent drivers; and they have an insatiable curiosity about all forms of mechanics. But they are unutterably careless and extravagant with their machines, never nursing them and accepting their breakdown as a matter of course. When it comes to their repair and maintenance they are far better at dismantling than at re-assembly. Indeed, a Russian will spend hours diligently taking a radio, a camera or a watch to pieces, just "to see what makes it work." But there is no attempt to put it together again.

THIS QUEER INFANTILISM is reflected in the Russians' fantastic waste of ammunition. For, after years of warfare, they still enormously enjoy making a bang. Perhaps it helps to relieve the overwhelming boredom in which all of them appear to be sunk—when sober.

The Russian rank and file is very inclined, as it were, to hunt in packs, to "gang-up" in little self-contained groups that forage for themselves, billet themselves, cook for themselves and generally look out for themselves without the slightest sympathy or comradeship even for others of their own unit. Save for a minor degree in the artillery and some of the élite guards formations, such a thing as esprit de corps can hardly be said to exist.

This utter absence of consideration for others was vividly demonstrated by an incident which occurred during the Russian advance on Budapest. The bridge over a village stream had broken down under the weight of traffic and no attempt had been made to repair it. But it was several days before anyone could be bothered to put up a warning for approaching drivers. "All day long," has written an eyewitness of the scene, "carts, cars, lorries and other vehicles would drive down the precipitous road to the river only to have to turn back. The horses slipped and fell on the steep, icy slope, and the lorries roared helplessly in first gear, their wheels spinning for a long time before they could surmount the slippery hill. Although scores, even hundreds, of people had had to turn around, not one of them thought of putting up a notice to inform others that there was no way across."

In general, the most primitive conditions are accepted as normal, so long as there is ample food available. Yet, for all the Russian's ability to

Hargreaves

"glittering in brass helmet and steel breastplate"

[7] Napoleon's *conscrits réfractaire* were trained in, and confined to, special camps under constant guard and with no privileges—save to head every difficult attack.

[8] According to Russian publications, such as *Behind the Front Line,* by General Pomarenko, the extermination battalions killed 18,910 officers and men, blew up 64 troop trains, destroyed 1,621 lorries, exterminated more than 300 traitors and, in the Crimea alone, captured one tank, 52 machine guns and 500 horses.

gorge himself to capacity, should occasion arise, he can survive, wolf-like for days on his own fat, while the Westerner, subjected to the same degree of privation, would long since have collapsed from exhaustion. In open warfare this is an attribute whose value can scarcely be overestimated. As to liquor—well, the thought cannot be suppressed that, properly handled, vodka could be turned into the Westerners' secret weapon!

But resourceful in his own cunning way as he may be, the Russian's reflexes are a good 50 percent slower than those of the Westerner; while the intelligence level of the junior officer and ordinary rank and file is reflected in the widely held belief that the Americans acquired Alaska by making the Tsar drunk and bluffing him into signing it away!

With such small but not insignificant sidelights on national character added to such information as may already be listed about a people it may be our destiny one day to meet and conquer in the field, what general conclusions can be drawn?

First and foremost, it is clear that we should be up against horde warfare in its most exaggerated form. It follows that the conflict would be primarily a war of infantry.

IT HAS ONLY TOO clearly been demonstrated that air power alone cannot halt the swarm advance of large bodies of enemy troops indifferent, as are the Russians, to the casualties that may be inflicted on them by rocket or bomb. Obviously, the starry-eyed visionaries of Lake Success who recommend that in any major war the Westerners—and the United States in particular—should rely almost exclusively on air and sea power, are either indulging in vaporous wishful thinking or else exhibiting their complete misapprehension of the shape of things to come. Air power can knock out specific targets and play havoc with orthodox lines of supply. But the Russians, of all troops, can rise superior to ruptured lines of supply and, moreover, have perfected a technique whereby essential food and ammunition can be brought forward by diffused, cross-country coolie labor acting as a two-legged pack animal. Moreover, they have gone a long way towards evolving a system of night movement for which the completely satisfactory answer has yet to be found.

In general terms, the answer to mass assault is overwhelming firepower in the hands of a well-trained infantry, armed with the best rapid-fire weapon obtainable, of which they have, through long practice, become the masters. This is particularly true if that assaulting horde is mixed and not welded together by a hard core of discipline. It must be the prime purpose of those responsible for the training, equipment and indoctrination of the Western infantry to work out exactly the right mix of weapons to produce the absolute maximum of firepower compatible with a high standard of mobility, as also for the right doctrine to ensure 100 percent efficiency in the chosen weapons employment. It should also be clearly realized that support weapons only exist to help the infantryman with *his* battle.

VOLLEY FIRE by infantry and its close-support weapons, backed by a powerful field artillery and a tactical air force, is the only thing that will hose into immobility the mass employed in an attempted "smother" advance. In the same way, wholesale slaughter must precede any attempt by a numerically inferior but technologically superior infantry to go over from the offensive-defensive to all-out attack. At Monte Cassino, it will be recalled, and again in the Ruhr area after Montgomery's passage of the Rhine, an enormous amount of rubble had literally to be bull-dozed out of the way before either man or vehicle could move forward over the heaped-up chaos into which the terrain had been turned. In horde warfare an enormous mass of *human* rubble will have to be blasted out of the way with firepower before either man or vehicle will be free to maneuver forward.

If that contingency is properly envisaged, then it becomes a matter almost of mathematical calculation to ascertain if the present firepower at the disposal of any representative Western formation is sufficient for the preliminary job of "hosing" with which it will be confronted.

To take the most representative

The Maginot Line: *defens*

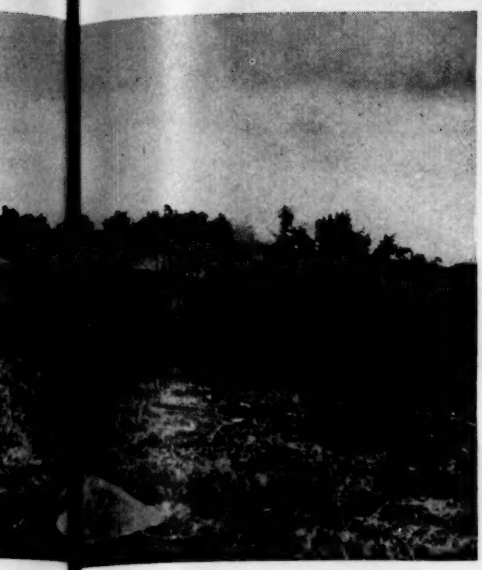
yard-stick of measurement, it has been calculated that, without regard to the discrepancy in the relative size of the respective formations, a United States infantry division can generate about one and a half times the firepower of its Russian opposite number.

Can this be said to provide anything like a sufficient margin of safety?

To begin with, would not a higher proportion of sub-machine guns, utilized as individual weapons, go a long way towards redressing the balance in these weapons—in which the Russians at present enjoy a marked superiority—while adding considerably to the unit's total volume of fire?

THEREAFTER, a highly valuable increase of strength could be added to each divisional formation if it were furnished with an extra battalion containing at least 48 medium machine guns of the type of the Vickers MMG. Light automatics, although possessing the valuable attribute of mobility, are incapable of the sustained volume of fire produced by the medium machine gun and are fatally subject to temporary jamming. As man-killers the lighter variety are not in the same class as the heavier weapon; while their servicing and maintenance are little less difficult.

Any increase in automatic weapons does, of course, embody more than one grave danger. To begin



Acme

defense was not superior to the attack

with, automatic weapons, because of their very nature, put a premium on wastage of ammunition on a really prodigious scale; 50 or 60 rounds often being expended where one aimed shot would be just as effective. Furthermore, automatic weapons appear to induce a definite form of "jitters" in their users, who spray the landscape indiscriminately and without thought of aim, and with the vaguest idea as to what constitutes their target. This, needless to say, is a matter of fire control or, rather lack of it—for fire control is a form of discipline to which the trigger-happy are inherently unresponsive.

In effect, the man who normally wields an automatic weapon in action would benefit tremendously if, at regular intervals, he were put on a strict course of musketry-firing. It would calm him down; it would retrieve him from the irresponsibility to which the automatic weapon user so easily yields; it would bring him back to the healthy discipline of fire-control; it might even turn him into a good shot!

For the lethal possibilities of the ordinary, everyday rifle should never be overlooked or ignored. No better individual weapon exists—*providing that each and every rifleman could be trained in the habit of firing his weapon as easily, effectively and automatically as he draws his breath.*

This is a vital consideration, crying for attention. For it has been reported by authoritative sources that during the attack on Carentan in July 1944, for example, not one man in 25 fired his rifle voluntarily. Even in hard-pressed Bastogne, in December of the same year, only 25 to 30 percent of the troops engaged used their personal weapons on their *own* initiative. Now, reports coming from Korea suggest that in this particular there is still room for considerable improvement. For, as von Moltke tersely put it, "even the finest weapon in the world is of no use if it is neglected. It might just as well be thrown away in a ditch."

IN THE LAST ANALYSIS, the infantryman *is* his rifle as long as he retains the power and the mastery to use it effectively.

It is his rifle that makes the infantryman formidable.

In discipline, initiative and team spirit, in mental alertness and technical know-how, the Communist forces do not begin to compare with those of the Westerners. But they do possess certain advantages it would be dangerously foolish to overlook or to minimize.

The need is imperative, for instance, to work out an overwhelming answer to the Russian MiG-15. For this machine can still inflict sufficient damage on the aircraft at the disposal of the Western Powers to be something of a menace. Fortunately, all recent intelligence points to the fact that the overwhelming answer is on the way. Again, there is the urgent want of a really superior tank-killer. Equally, there is the continued need for training for operations in wild, broken, hill-seamed country, against tricky, intensely mobile guerrillas; warfare that will be fought-out far away from roads and the mechanized transport that only recognizable roads can serve to operate—with the corollary that the alternative of pack transport will impose a far more spartan way of life on the individual soldier.[9] Then there is a clear demand for more experiment and instruction in the difficult art of moving and fighting by night, perhaps the hardest task a soldier can be called upon to perform.

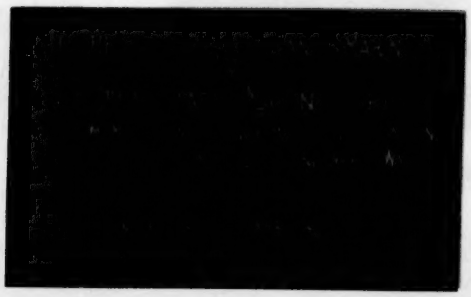
Thereafter, the dire necessity still persists to cut down the preposterously over-weighted "tail"—on average, nine men behind the lines to one man in them—so that the "head" may be furnished with more "teeth."

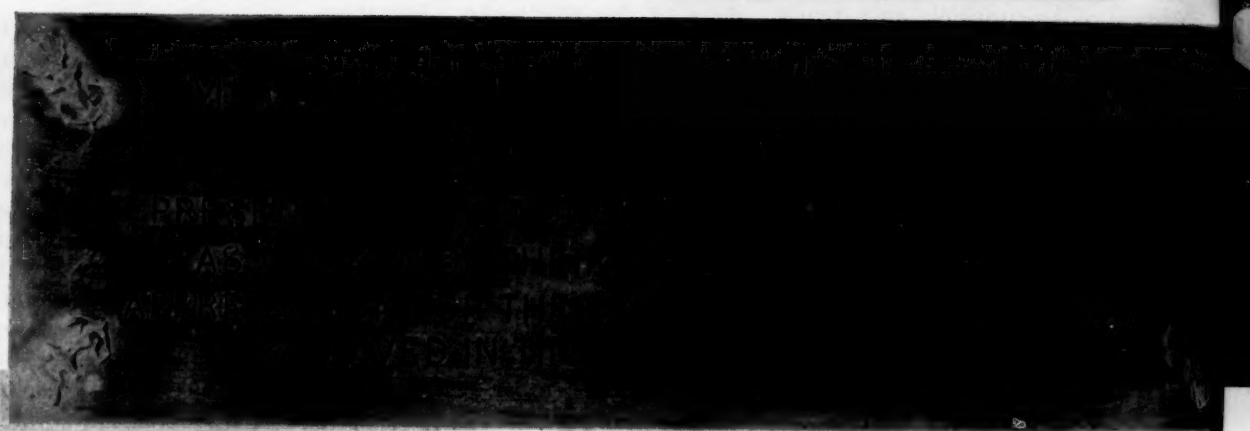
Finally, full consideration should be given to the fact that, with the vast open spaces over which any major conflict with the Easterners would be likely to range, the infantryman would very probably be called upon to march a good 30 miles across country, at a steady three miles an hour, and fight a brisk, resolute action at the end of his stint. For the days of the truck-bound fighting man would appear to be over; once more he looks like having to get there on his own two feet. This has been the ultimate test of the foot soldier's quality since the days of Marlborough's fabulous march to the Danube and the tramp-and-fight, fight-and-tramp of Wellington's famous division in the Peninsula.

FOR LET IT AGAIN be affirmed with all possible emphasis, that the war which looms over the horizon, even more than previous conflicts, will be fought and won by the man who does his fighting on his own hind legs. The hardest-worked but least regarded, the most adaptable and most generally useful of all fighting troops that take the field, it is only the ordinary common-or-garden footslogger—be he Leatherneck or G.I. Joe—who can generate the pulverizing, close-proximity firepower that will blast away the successive swaths of cannon-fodder which horde warfare will hurl into action. In the same way, it is only the infantry fighter who can punch home victory, since it is he who closes with his adversary and immobilizes him either in surrender or in death.

But at least in the war that threatens he should go into the fray armed with a very considerable knowledge of what he would be liable to encounter at the hands of his enemy. For it is clear that in Korea, the Kremlin, with docile Russian-trained catspaws to "take the knock," has been trying out the battle-practice it would employ were it to come to open warfare between Communist imperialism and the free nations of the West. We should be more than foolish if we failed to profit by the lessons embodied in this elaborate rehearsal. **USMC**

[9] In effect, "Good basic rations, a speedy postal service and to hell with canteens, bun-wagons and cinemas," as one veteran recently expressed it.





Anptoto

Netherlands

"JOIN THE ROYAL NETHERLANDS Marine Corps and train with the U. S. Marine Corps" was a most enticing recruiting slogan of the 1943-45 era. Before a lack of transportation facilities and other considerations forced a discontinuance of the program, some 5,000 men from the Netherlands had in effect "joined" the United States Marine Corps. They wore the same uniforms, followed the same training schedules, enjoyed the same recreational facilities, lived in the same barracks and,

A unique wartime alliance permanently welded the bond between Marines of the Netherlands and the United States

Anpfoto

Korps Mariniers

By LtCol H. W. Edwards

in short, became fellow Marines. The friendly ties of common professional interest and mutual respect that had linked the two services for many years were welded permanently in the forge of this unique wartime association.

General Lemuel C. Shepherd, Jr., Commandant of the Marine Corps, renewed that friendship in March of this year by paying an official visit to Holland, thus returning a call made on the U. S. Marines last fall by Colonel Peter J. van Gijn who has since become Commandant of the Royal Netherlands Marines.

In three days of official calls and conversations, General Shepherd had visits with Her Majesty Queen Juliana and His Royal Highness Prince Bernhard as well as the Netherlands Minister of Defense, Minister of State for the Navy and Chief of Naval Operations. In culmination General Shepherd was taken to the training camp of the Royal Netherlands Marine Corps at Doorn, Holland, some 45 miles to the east of the Hague. There, 1,100 Dutch Marines in battle dress stood at rigid attention while honors were rendered to General Shepherd, after which he trooped the line to the strains of the U. S. Marine Corps Hymn.

It was a proud group of Marines that General Shepherd inspected, for theirs is a regimental spirit that has developed over some 288 eventful years since the founding of their Corps on 10 December 1665. The Corps, organized on the recommendation of Admiral Michael A. de Ruyter of the Netherlands Navy for employment as ships' detachments, set a distinguished example for the establishment of the United States Marine Corps a century later.

Commander Baron W. J. van Ghent is given considerable credit for the organizational genius which enabled the newly-created Corps to help win brilliant victories in a four-day naval battle in 1666 during the second Dutch-English War. One year later the Dutch boldly sailed up the Thames and Medway, landed 800 Marines, seized the fortress of Sheerness and blew up magazines at Chatham. This was the most serious defeat ever suffered by the Royal Navy and resulted in a treaty of peace most favorable for the Dutch.

Yet another foe, the French, were to test the mettle of this *Korps Mariniers* in the 1670s when they attempted to invade the Netherlands. On this occasion the Corps played a defensive role, and LtCol Francois Palm achieved immortality when he held the French at bay in the town of Woerden until the Dutch army could establish a stronger defensive line. There were no survivors among the Marines.

Indeed, the tapestry of Dutch history is richly woven with incidents of gallantry on the part of the small Corps of Royal Netherlands Marines. As a hardy, sea-faring race, the Dutch found many occasions demanding the attention of their soldiers-of-the-seas.

In 1673, some 2,200 Dutch Marines participated in the sea battle of Kyjkduin when the Dutch fought both the French and English and caused the latter to sue for peace. The following year, they took part in the operation against the French at Seneffe. In this engagement two armies lost one-seventh of their strength in men killed alone.

Their homeland occupied, Dutch Marines trained on U. S. beaches

Still later, beginning in 1702, Netherlands Marines were included in the Dutch-English force during the War of the Spanish Succession. The combined unit fought brilliantly on land under Marlborough's leadership. On the seas, the Dutch fought with the British fleet, precipitating the near-collapse of the French and aiding the British Marines in the capture of Cadiz, Gibraltar and Barcelona.

The curious shifting of naval alliances during the 18th and 19th centuries had no visible effect upon the fighting inclinations of the Dutch Marines. In 1797, as Holland came under French domination and more specifically under that of Napoleon, members of the Corps fought in the sea battle of Kamerduin. In 1816 they were present during the bombardment of Algeria as Britain stripped France and Holland of their colonial empires. And in 1825-26 they took part in the Java War to suppress piracy, just as their American counterparts were doing in the Caribbean area.

The sphere of the Dutch Marines' activities returned to the Pacific in 1863 when on 11 July of that year they battled Japanese shore batteries and ships in the Strait of Shimonoseki (Honshu). It is interesting to note that U. S. Marines dueled with similar batteries and ships in this area five days later as crew members of the USS *Wyoming*.

As an instrument of the Netherlands government, the Corps formed a part of the expedition against Sumatra in 1873 and South Bali in 1906-08, fought bandits in Surinam in 1928, and in 1929 was sent to Curacao, Netherlands West Indies. In recognition of the unique and loyal service of the Corps, Queen Wilhelmina awarded the Royal colors on 16 September 1929.

The first operational tie between the Dutch Marines and the U. S. Marines came in 1937 when the Dutch destroyer, *van Galen,* participated as part of the naval force in the waters off Shanghai, China. The Globe and Anchor was represented by U. S. Marines of the 4th and 6th Regiments on that occasion.

As war clouds gathered in Europe, the Dutch Marines were forced to leave the defense of the colonial empire because of the more important threat at home. However, some of their number did participate in the heroic defense of East Java along with the East Indian Army, while others were serving aboard Her Majesty's cruisers *De Ruyter* and *Java* during the Java Sea battle.

When the Germans came in 1940, the Dutch Marines opposed them. They manned defensive positions along the Zuider Zee until overwhelmed by numerically superior Nazi forces. A small group of Marines also participated in the defense of Rotterdam until the last man was wiped out. Their heroic defense of the Maas River Bridge in that city has since been commemorated by a monument.

To a less determined organization this might well have been the end, but the Netherlands Marines did their share in living up to the motto of the Dutch Crown *Je Maintiendrai* (I will maintain), and their perseverance in becoming re-established despite the occupation of their homeland gave that motto new significance.

In the years before World War II, the Royal Netherlands Marines had modeled their organization, uniform and customs after the British Royal Marines, while patterning their arms and equipment after the Germans. Service in this traditionally elite organization was a career proposition for both commissioned and enlisted personnel.

All officers were graduates of the Royal Netherlands Naval Academy at Den Helder, where entrance requirements included five years of high school and a knowledge of French, English and German. The three-year course at the academy included yet another language—Malay, the tongue of the Netherlands East Indies.

Promotions in both the officer and enlisted ranks were slow. The rank of captain represented a 12-year achievement. There was no rank of major and appointments to lieutenant colonel and colonel were rare. On the enlisted side, if a man showed promise he could be sent to non-commissioned officers' school to earn a corporal's stripes after three to five years' service. A sergeant-major would represent at least 15 years' service, and a truly enterprising lad might achieve the highest enlisted rating—adjutant—after 20 years. In fact, the "old breed" on this side of the Atlantic will find that the Dutch promotion system compared rather favorably with that of the U. S. Marines of the same era.

With the Netherlands conquered by the Germans in 1940 and the Dutch possessions taken over by the Japanese in 1942, the government-in-exile began to look for outside support to reform its scattered forces.

Hand-in-hand: Dutch and U. S.

The British undertook the training and equipping of up to 60,000 Dutch army troops as they became available, and the Australians offered to train and equip the Dutch East Indies Army. The Netherlands Marines-in-exile, meanwhile, were looking with renewed interest at the activities of the U. S. Marine Corps.

After the Marine landing at Guadalcanal, so much fresh hope was generated among the Netherlands Marines that the Dutch Naval Ministry approached the Combined Chiefs of Staff for permission to send a cadre of 20 officers and 200 enlisted men to the United States for training by the U. S. Marine Corps. They were to be followed by monthly quotas of reserve officers. And, finally, it was requested that upon the liberation of Holland from the Nazi yoke, 5,000 Dutch Marines be trained, organized and equipped as a U. S. Marine reinforced regiment, prepared to serve in the Pacific against the Japanese.

Almost immediate approval was given to train the cadre, and the United States Joint Chiefs of Staff took under consideration the balance of the request. Facilities to receive the trainees were prepared at Camp Lejeune, and in late September 1943, LtCdr van Hahften arrived with 50 enlisted Marines, followed in October by a detail from Surinam (Dutch Guiana) and Curacao (N.W.I.), and again by a group of 25 recently graduated from the Commando School in England. On 6 October, the JCS approved the balance of the request and directed the Marine Corps to make all necessary arrangements and to provide clothing, equipment and training as required.

At this juncture, U. S. Marine facilities and manpower were available and the scheme appeared quite practicable. Subsequent developments in the war, however, were to make the program increasingly difficult to carry out. As the tempo of battle increased in the Pacific, training facilities became more taxed and shipping space less available.

First arrivals for training were put through an infantry leader-instructor school at Camp Lejeune to fit them to train those to follow. A 13-week course was established, considerably abetted by the facility many had previously acquired in speaking the English language.

Administration for the visitors was handled by their own liaison detachment, as was their pay. Otherwise the Dutchmen were fitted right into the Marine program, and this included use of all recreational and medical facilities and the wearing of U. S. Marine uniforms with the exception of hat and collar ornaments provided by the Dutch government.

In implementation of the second portion of Dutch training needs, reserve officers began to arrive in Quantico in January 1945, and soon 40 were enrolled in a course that combined essentials of both the Candidates and Reserve Officers' Classes. This was not the only facility for Netherlands Marines provided at Quantico, however. As the training program became more diversified they were enrolled in both artillery and ordnance schools.

The San Diego area was called upon to furnish training in tank, antitank and amphibian tractor specialties. Whenever possible, on-the-job training was provided to supplement the formal school training, and for the 19 Dutch "tankers" this resulted in a tour of duty with the 5th Marine Division at Camp Pendleton.

Meanwhile, Camp Lejeune had also broadened its curriculum to include engineer, communications, antiaircraft and medical specialties.

By April the Dutch government felt it necessary to return most of the original cadre of Marines to England to assist in recruiting and processing of the larger draft that would be sent as soon as conditions in the homeland permitted. The remainder of the cadre finished its training in July but remained on at Lejeune.

"their work . . . characterized by commendable earnestness"

Of their work BrigGen Alfred H. Noble had this to say, "In general, it is considered that the progress of training of this detachment had thus far been very satisfactory, the discipline has been outstanding, and their work has been characterized by commendable earnestness and cooperation."

As the signs became more unmistakable that the Royal Netherlands government-in-exile would be able to provide at least 5,000 to 7,000 men for Marine Corps training during the new year, the Commandant alerted Lejeune, Quantico and the San Diego area to prepare all available facilities for that number of trainees from Holland. The American Navy was asked to provide shipping for a minimum of 250 men a

month, and the Dutch recruiting effort shifted into high gear. As more areas of Holland opened up, enlistments in the Marines increased.

Unfortunately, there was another side to the coin. Toward the end of the war in Europe, our hard-pressed Navy found it increasingly difficult to handle all transportation requirements. Expanding to meet its own enlarged commitments in the Pacific war, the U. S. Marines also faced the problem of finding sufficient quarters to house the influx from Holland. Finally, the lend-lease program which had sustained the Dutch training scheme threatened to expire.

Dutch perseverance overcame these handicaps and by July a total of 3,429 Netherlands Marines were undergoing training in the United States. While the bulk were at Camp Lejeune, such other Marine bases as Quantico, Pendleton and Parris Island helped out, as did numerous smaller facilities for specialized training. Still awaiting transportation were some 1,720 Marines in Rosneath, Scotland, and 2,000 others in Antwerp. This number would have approached the goal which the Netherlands considered most desirable—a total of 8,600 comprising a reinforced regiment of 5,000, a replacement draft of 2,000, some 600 instructors and 1,000 administrative personnel.

OF THAT NUMBER the JCS would approve only 5,000 for transportation, but even that total was sufficient to cause the U. S. Marine Corps in August to requisition facilities at Camp Davis, adjoining Camp Lejeune, as the primary training site for the Dutch Marines. By September a total of 4,848 were trained and equipped by the U. S. Marine Corps and prepared for assignment to the Pacific theater. Organized under American tables of organization, the Netherlands force had a headquarters and service battalion, three rifle battalions, an artillery battalion, a motor transport battalion, an engineer battalion, a service and supply company, a tank company, an amtrac company, a medical company and special intelligence units.

It was a frustrating experience for this dauntless Corps to find both the European and Pacific wars ended before it could take the field. With its chance gone to repay the Germans and the Japanese in kind, the Corps seized the only other available opportunity. Dutch colonial affairs needed tending in Java and it was for the Netherlands East Indies that over 4,000 members of the 1st Regiment Reinforced, Royal Netherlands Marine Corps, sailed in November, the balance returning home. This regiment, in recognition of its association with the "Devildogs," carried the appellation *Groene Duivels* (Green Devils).

By the end of March 1946 the strength of these Marine forces in the Indies had permitted the relief and evacuation of British and Indian troops. Meantime, the Royal Netherlands Naval Academy had been re-established at Den Helder, and special courses featured U. S. Marine Corps methods and were being taught by Dutch officers trained in such methods.

THE ROYAL Netherlands Marine Corps of today, numbering some 200 officers and 3,800 men, has, like the British Royal Marines, given up such specialties as artillery, engineers and amphibian tractors to concentrate on naval assignments. Ships' detachments, organized in platoons, are assigned duty on major combatant vessels; three platoons are on the larger ships and one on the smaller types. Such close liaison is maintained with the Navy that during full mobilization, naval officers will serve in the Marine Corps in specialist capacities and assume full identity as Marines. About half the Corps is composed of volunteers on a six-year enlistment basis with the balance made up from 21-month conscripts. An organized reserve is maintained to provide a basis for quick expansion.

Some diversity of duty is reflected by the assignments which the Corps has today in the Netherlands West Indies where a battalion mans the defenses, while one company shares security duty with the Netherlands Army in Dutch New Guinea.

The Commandant of the Corps, General van Gijn, has only recently assumed his position at the headquarters in Rotterdam. His predecessor, MajGen M. R. de Bryne, will be remembered by many United States Marines as the senior liaison officer in the American training program. Other posts of the Corps, in addition to Doorn and Den Helder, include an amphibious training camp at Tessel and a troop depot which quarters the band and military police company at Rotterdam.

Just as the Corps today has its definite links with the past in customs and traditions, so also does it bear the imprint of intimate association with the U. S. Marine Corps. Our Marine type of utilities is still worn, weapons are American types and training is still reminiscent of Quantico and Lejeune. Beyond these material things there is the more abstruse quality of camaraderie which the two Corps of Marines feel in their relationship — an aura of friendship that is not only professional but personal.

Prior to leaving for the Netherlands visit, General Shepherd considered it appropriate to present to the Dutch some concrete evidence of this enduring relationship. To this end, he requested Felix de Weldon, the sculptor of the Iwo Jima statue, to cast a bronze replica of the official United States Marine Corps insignia. It was mounted on a dark green marble slab to which a brass plate was attached, bearing the words:

"TO THE ROYAL NETHERLANDS MARINE CORPS
FROM THE UNITED STATES MARINE CORPS
IN COMMEMORATION OF OUR YEARS OF ASSOCIATION AND CLOSE FRIENDSHIP DURING WORLD WAR II"

This plaque was presented as part of the formal ceremony at Doorn.

Without previous indication and in a spirit of mutual admiration, the Dutch had also prepared a durable token and, following the presentation of the U. S. Marine plaque, General van Gijn presented to General Shepherd a wooden plaque bearing a sterling silver replica of the Royal Netherlands Marine Corps insignia. It was inscribed:

"EMBLEM OF THE ROYAL NETHERLANDS MARINE CORPS
PRESENTED TO THE UNITED STATES MARINE CORPS
AS A TOKEN OF THEIR SINCERE AND DEEP FELT APPRECIATION FOR THE SYMPATHY AND COMRADESHIP RECEIVED IN TIMES OF WAR AND PEACE."

USMC

look behind the GRIEVANCE

Is it possible to develop a 'request mast' that works to everyone's satisfaction?

By LtCol R. J. Ofstad

THE COLONEL WAS AMAZED AT first, and then indignant as the Inspector-General's representative unfolded the facts.

Out of a command of 400 men, 86 had a gripe to air with the I. G. The grievances ran the gamut of dissatisfaction with the job assigned to complaints on the chlorine content of the local water supply.

"I can't understand it," said the colonel shaking his head. "The command has been running smoothly enough on the surface. I haven't heard any complaints . . . Why didn't these men come and see me?"

Why *didn't* they go to see him? The colonel had established a request mast as prescribed by Navy regulations and had published the grievance-handling procedures as required by Marine Corps regulations.

Each Monday morning the sergeant major had lined up the men who had requested to see the colonel and marched them in one-by-one at attention. At first there had been quite a few. Now it was hardly necessary to hold a mast each week—there were few formal complaints, and the colonel felt that all the grievances had been settled satisfactorily.

In fact, over a cigar and brandy at the club, the colonel had mentioned to one of his colleagues that most of the men who came to see him didn't actually seem to have any difficult problems.

"They shift from one foot to the other and just mumble," the colonel related. "None of 'em ever have anything you can put your finger on."

There were several reasons why all seemed smooth on the surface, and why the colonel never got to the root of his men's problems. First, settling grievances through a request mast will not alone provide satisfactory personnel relations. The formal procedure and the position of attention are not conducive to the outpourings of pent-up grievances. Often the man is confused as to the actual cause of his disturbance. It takes some probing to plumb the depths.

Secondly, even if the grievance is found and settled at the time, the same problem may present itself at a later date if the cause of the grievance is not found and eliminated. The "ounce of prevention" is all-important. The command must exercise preventative personnel practices and find some type of motivation to furnish the "ounce." It should strive to reach the millenium wherein both subordinates and superiors are satisfied in their relations with each other.

Thus it is necessary to locate and eliminate situations that cause the men to become dissatisfied with the command or with individual superiors. Any such situation constitutes a grievance, which may be defined liberally and fully as follows:

A grievance can be any discontent or dissatisfaction, whether expressed or not, valid or not, rational or irrational, logical or illogical, arising out of anything concerned with the service that a Marine thinks, believes or even feels, unfair, unjust or inequitable.

"Shave off that mustache" . . . "Bluejeans are not considered adequate liberty clothing" . . . "Troops will be mustered and marched to the mess hall by the senior NCO" . . . any order can start a deep-rooted grievance.

The definition, it is true, exceeds the ordinary dictionary definition, but it is necessary in this case to recognize the different types of grievances at different stages. The fact that the definition covers any discontent or any dissatisfaction arising out of anything concerned with the service should be clear enough, although too many superiors seem willing to deal only with those grievances directly concerned with the command.

To reach the desired level of relations, this phrase must be interpreted to include not only those direct grievances but also those indirectly affecting a serviceman's job, such as availability of housing for

his family, transportation, liberty facilities and possibly even family relations.

These examples may appear to be beyond the scope of a military leader but unless an officer is willing to accept the responsibility of assisting his men in the solution of such problems, the desired goals of high morale and satisfactory personnel relations cannot be attained.

The definition recognizes that a grievance may be expressed or not, valid or not, rational or irrational, logical or illogical.

Now this covers a lot of ground, but an implied grievance is just as real and is usually more dangerous than an expressed case of dissatisfaction. After all, when a problem is brought out into the open it can usually be solved, but when it remains hidden it is a constant source of danger. Emotional reactions may cause grievances just as serious as those that are rational. A command must pay equal attention to both.

The problem is thus established. Let us look into the grievance machinery presently in use by the Marine Corps to determine whether current practices are effective.

THE REQUEST mast is the only formal grievance machinery prescribed by regulations. However, experience has shown that additional grievance handling channels have developed on an informal basis, usually through some senior who has assumed the responsibility of helping his men with personal problems. Chaplains attached to the command also handle a steady flow of personal grievances.

Although officers insist that their doors are open at all times and that they are ready to receive all gripes and complaints, most subordinates are reluctant to talk to their commanding officers about their troubles. Just the thought is often enough to drive them over the hill with their problems rather than to the CO.

Of those men who avail themselves of the opportunity to get things off their chest, many are chronic complainers. In addition, of course, are the 10-percent, who, if they do get the word, insist on misinterpreting it. Even the well-intentioned subordinate who does take advantage of the request mast opportunity often does not really know what is really troubling him.

The informal court of human relations develops because of the many weaknesses in prescribed formal procedures. The sympathetic personnel officer, the fatherly sergeant major or the platoon leader who is known to "go all out for his men" may suddenly find that he has become the outfit's "Mr Anthony." In him the men have found a superior who will willingly assist them without their having to present their problems officially to the "Old Man."

These informal grievance channels actually accomplish a great job and have much to recommend them, but it is possible for an informal system to develop along the wrong lines, since unfortunately there are always people around who are ready to give advice on any subject whether they know anything about it or not. Such a situation might increase rather than eliminate the grievance problems. For these reasons a formal grievance ladder should be developed in all organizations.

Currently, grievance machinery in the service is obviously inadequate in its present form, and should therefore be overhauled. But before advocating a revised system, let's look at the correct way to handle each grievance problem that arises and the principles involved which will determine how each step should be carried out.

Determine the correct grievance: We must know the problem in order to deal with it intelligently. This is not as simple as it sounds. Complaints supposedly eliminated or settled often crop up again a short time later if the root of the matter isn't reached.

Gather the facts: The main problem in this step is to separate fact from opinion. Organization personnel records are usually the best sources of information but relief agencies or outside organizations may have to be consulted. Use them if you have to do so.

Establish tentative solutions and compare: Prepare an estimate of the situation. Try to work in solutions from past experiences or from the experiences of others.

Apply the solution: The solution selected must be delivered simply and clearly and the subordinate

must be made to realize that it is the best possible solution under the circumstances. If the man will not accept the solution offered, further review may be necessary and a new solution developed.

Follow-up: It is not safe to assume that a grievance has been eliminated until a follow-up has been made to determine if the complaintant's attitude has been changed favorably. The follow-up may be made by casual observation, indirect discussion, investigation by others or by direct questioning of the man himself.

Now we know what steps should be taken in handling a problem, but the steps in themselves will not be effective unless they are applied with fairness and honesty, and unless the principles of good interviewing are used.

Though most superiors are fair and honest in their dealings with subordinates and their problems, too many fail to convince the man. Often it is because the superior feels that the subordinate's opinion is not of great importance, so long as the actions in themselves are fair. This is not true. If the grievance is to be settled once and for all, the subordinate's opinion in the matter is most important.

In addition, many superiors fail to realize their responsibilities toward the men they lead and are often unwilling to carry such responsibilities. A superior must have confidence in himself and must develop confidence in his subordinates.

Confidence can only be built up over a long period of good relations, but that same confidence can be destroyed overnight by the inept

handling of a single case.

Now to set the stage for handling the problem—and the use of the principles of good interviewing. Skilled interviewing is an art, and special training in psychology and human behavior is desirable. But every leader can learn to conduct a successful interview by simple advanced planning and by adhering to a few basic rules.

First, select a favorable location. Hold the interview in a quiet and private place. Few men want their problems overheard and the thought that someone else is listening may tend to make the man tighten up.

Once the location is set, put the man at ease. Invite him to sit down, offer him a cigarette and let him think things out. No man can think clearly or present a case intelligently if he is forced to hold a formal position. I doubt if Patrick Henry would have found the inspiration to utter his stirring "Give me liberty, or give me death," if he had been forced to deliver his speech standing at the position of attention.

Once he is seated and at ease, encourage talk and hear the case fully. Allow the man to tell and re-tell his story. This strategem will bring out the whole complaint and should uncover any implied grievance that he has not previously expressed. The "talking-out" process will tend to cool the man off and it is possible that the mere telling of the story may be enough to settle the grievance. Above all, be certain to permit the man with the grievance to do all the talking. The superior conducting the interview must limit his interruptions and comment to a few words now and then to keep the interview flowing and to hold the discussion within limits.

After the case has been heard fully the superior must be able to close the interview correctly. He should be prepared to close by stating his position clearly and accurately while maintaining an honest and sincere attitude. If an immediate solution to the problem posed is not available the man should be advised as to when he may expect an answer. Delays are not desirable, but a workable solution must be given, and therefore a delay is warranted when further investigation or thought is required to settle the case.

With the principles of handling grievances in mind, it is possible to develop a grievance machinery based on command responsibility.

The first requirement for a sound system involves the establishment of clear-cut and well-publicized grievance channels within the primary chain of command in each organization. The plan must include provisions for staff advice and assistance as required. To illustrate, let us consider the the case of an infantry battalion.

For the purpose of this discussion, and for simplicity, we will assume that commissioned officers only will be assigned positions in the structure. NCOs could be used just as well, of course, providing their position in the structure is known and understood.

A grievance originating in the ranks of a platoon would come to the attention of the platoon leader through voluntary action of the man or through an investigation of questionable attitudes or conditions. The platoon leader is the man's immediate superior and grievance cases should be acted upon by him before any other action is taken. The immediate superior is the key to good grievance handling. By-passing his position would weaken the entire system of the command.

Admittedly, the platoon leader is not in a position to settle all grievances, so further steps must be provided. Some grievances would necessarily be channeled to the chaplain's office at this level, while those within the limits of command responsibility would be acted upon, or passed directly to the next senior line echelon. (In this case it would be the company commander.) If the company commander could not handle the problem, it would go on to battalion level and, if necessary, to higher commands until the matter is settled.

These line agencies would have staff assistants to advise and assist, but in every case they should recognize and assume their command responsibilities by carrying out the corrective action necessary.

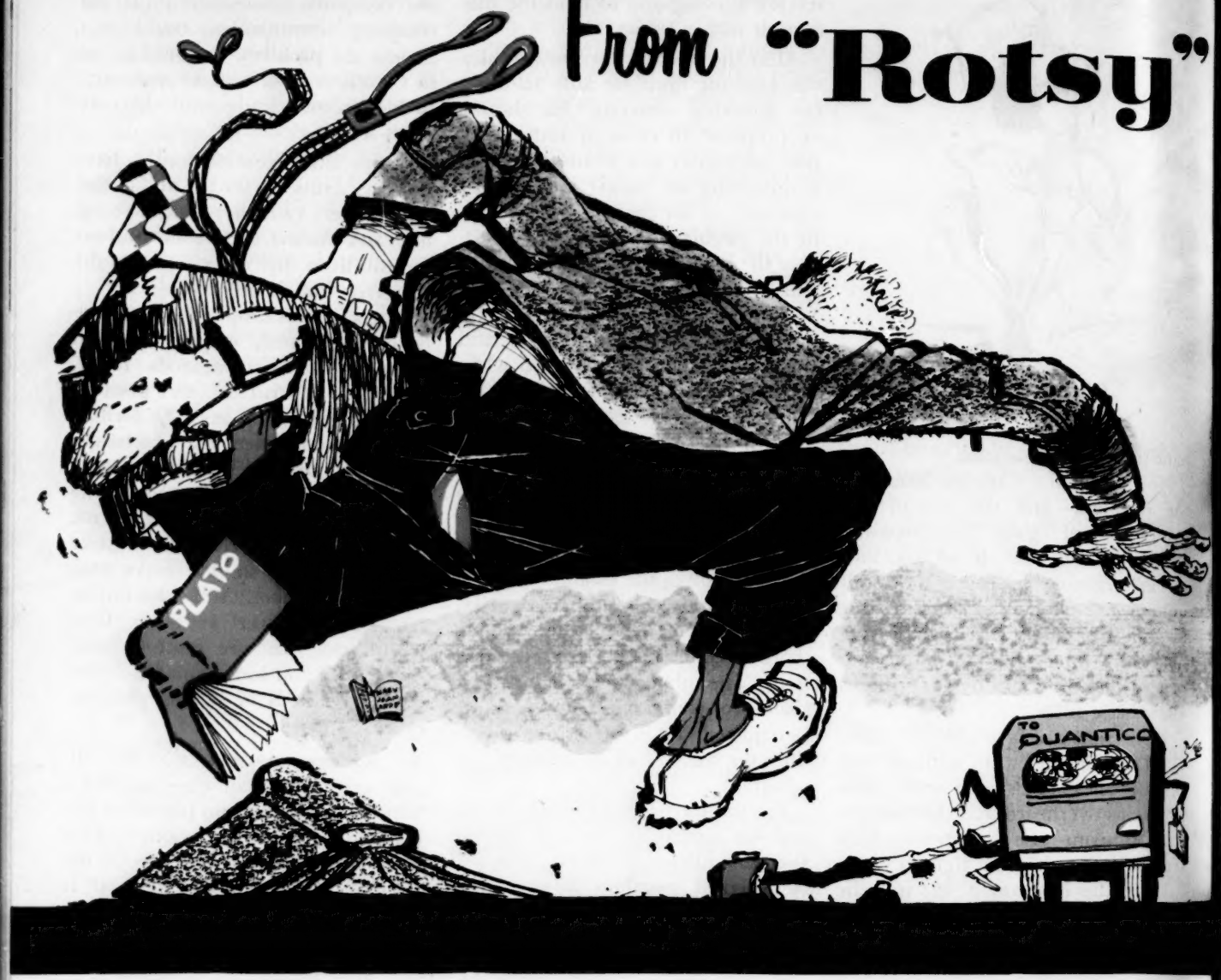
The system is simple and, as previously mentioned, is informally in effect in many commands today. However, its structure and position in the organization must be formalized to become effective. The ladder should go straight up the chain of command with staff assistance being funneled in at appropriate levels. The structure and channels must be publicized fully so that every man understands them. And most important—every officer at every level within the structure must be educated fully and indoctrinated in the correct methods of solving problem cases.

REGARDING PUBLICATION of available grievance channels—an official letter or memorandum posted on the bulletin board is not enough. Few men take the trouble to wade through an official document if it does not affect their promotion, liberty or pay. If they do read the order, they may fail to understand it. Thus it is necessary to have class lectures on the subject and group discussion question-and-answer sessions on the methods in use. Special "chain-of-command charts" may be used effectively for this purpose.

By the same token, the officers within the chain must be given formal training in the steps and procedures involved and especially in the tenets of good interviewing.

In summary, the establishment of a scientific, yet simple, grievance structure within each command will provide the answer to the problem of the subordinate becoming dissatisfied with the command or his superiors. This will reduce the disciplinary problem, and further intelligent corrective action in the disciplinary field will allow the attainment of our objective: "both subordinates and superiors satisfied in their relations with each other." USMC

From "Rotsy"



"ROTSY BOYS!" SOUNDS AWFUL, doesn't it? Like the Dead End Kids or the Bowery Boys or some other product of Hell's Kitchen. Yet, at many of the 52 Naval Reserve Officers' Training Corps units the new Marine officer instructor is quite likely to hear the term "Rotsy" during his first week of school.

NROTC, or N-rotsy, is the term the students themselves use until someone goes to the trouble to explain that it is hardly a dignified term for prospective Naval — and Marine—officers.

Regardless of what they call themselves, the NROTC is very much with us today. The Marine Corps is receiving its quota—based on the allotment of 16⅔ percent of the whole —and Marine-trained NROTC officers may be found today wherever Marine units are serving.

What is the Marine NROTC officer candidate like? What does he think? How does he differ from his Navy counterpart—the fellow who is training to become a line officer or a supply officer?

To understand these questions and to find the answers we must look at the NROTC program and what it is trying to do. The present program is designed to implement a plan which has as its objective the training of students in civilian colleges and universities for Naval service. The objective looks toward stamping young civilian students with the Navy trademark. Twenty-four credit hours of naval science (as the courses taught in the program are called collectively) are balanced against the remainder of credit hours necessary to obtain a baccalaureate degree.

By Maj J. R. Stockman

After receiving his degree and commission (usually about the same time) the newly appointed officer goes to fulfill his obligation of active duty according to his contract with the Navy. This obligation is based on provisions of the Universal Military Service and Training Act, and is uniform for officer candidates in all the services.

The new Marine second lieutenants report to the Basic School at Quantico before assignment in the field. According to the basic principle in the program these new young officers are now ready to absorb a great deal from their regular counterparts, and to give something in return. The something in return is said to be a fresh and different outlook which they get from their civilian college backgrounds. However, it is only after the second lieutenant graduates from the Basic School that

"to Marine

After the first summer at Quantico a marked change takes place in the NROTC student's attitude

he has much of an opportunity to leaven the rest of the officer corps with the freshness of his outlook. And by then the Marine Corps has left its indelible mark and you can't identify young Lieutenant Goldbar as a NROTC product, anymore than you can pick out a PLC, an OCC, a meritorious NCO or a Naval Academy graduate.

What does the NROTC Marine study while he is still in college? The same things most college students study, plus — and here's the basic difference—Naval Orientation during his freshman year, Naval Ordnance and Gunnery during his sophomore year and Marine Science during his last two years.

What is Marine Science, this term that lumps together all that will be taught our young man during his junior and senior years? To break it down, it goes something like this: During the first semester of his junior and senior years he takes a course called the History of the Art of War, in which he studies selected battles, including Alexander's triumph at Arbela through Hannibal and Caesar to William the Conqueror at Hastings, and on through Frederick the Great and Napoleon. From the Revolutionary War in our country he goes to the War of 1812, the Mexican War and the Civil War, on which 10 lesson-hours are spent, and then on through two world wars to Korea. While studying these selected battles, and in order to understand them properly, he is introduced to the meaning of policy, strategy and tactics and their interrelationship. To understand policy so that he can see its relationship to the strategy employed to implement it, he must have background in enough political and economic history to set the stage for the critical battles to be examined in detail.

If the prospective Marine officer learned nothing more than this, he would report to Quantico with a well-rounded background of military history. But he has only started. Next comes a new semester course called Basic Strategy and Tactics, introduced to the curriculum this year. During these 45 semester-hours he will become acquainted with military fundamentals, with basic terms and their meaning, with problems of organization, of planning and of execution in a variety of circumstances. He looks at the fire team in offensive combat, moves on to the squad and then to the rifle platoon. After his study of offensive action he turns to defensive tactics. Both types of action are illustrated by occasional reference to actual unit actions in one of the many World War II battles or Korea. He studies the supporting arms available to small units and learns of the need for careful coordination of effort. He speaks in terms of fortified positions and built-up areas, of jungles, woods and mountains, of partisan operations and river-line operations, of patrolling and raids. So far he has concentrated on tactics, but toward the end of the course he studies strategy (including German and Allied) used in World War II.

BY THE END OF the semester our man is ready for a breather—and he gets it—enough time off to refresh him and set him up for his six weeks' summer cruise at the Basic School at Quantico. Now the Marine Corps really takes him in hand for the first time in his career. He fires for qualification on the range and becomes familiar with most of the weapons that he studied in his laboratory back at school. And he hikes and he studies and he drills and—

but why say any more about Marine training? Let's go back to college with him and see what he will study his last year.

One of the first things a Marine officer instructor at a NROTC unit notices each fall is the difference manifested by the new seniors who spent part of their summer at Quantico. The Marine mark is there and even the Navy students in the unit notice it. There is a new seriousness, a certain erectness, a look of pride. Before many days pass the instructor is aware of greater motivation, greater desire to learn.

And what is it that is being offered now? Three big subjects, and they will keep our young man busy for the whole academic year. For 58 session-hours he will study amphibious warfare, beginning with its concept and a brief history, and then a day-by-day study of such things as landing operation phases, task organization, staff organization, amphibious intelligence, naval gunfire support, air support, artillery, coordination of supporting fires, communications, logistics, operations orders and ship-to-shore movement, to name a few. This will follow incisive studies of Gallipoli, Guadalcanal, Tarawa, Saipan and Tinian, Iwo Jima, Salerno, Normandy and finally, Korea.

BY NOW it should be apparent that our prospective lieutenant has been exposed to the equivalent of a 10-foot shelf of what the young Marine officer should know. But his education is not complete. Next comes 12 session-hours on the Uniform Code of Military Justice, including jurisdiction to courts of inquiry. And then he finishes up with 12 more session-hours of leadership, in which he examines such topics as science and human relations, the individual, administration, training, discipline, inspections and techniques and situations based on actual experiences.

Now we know something of what the NROTC Marine studies during his last two years in school. We have neglected to mention his laboratory periods, which are designed to supplement his regular academic instruction. In these "lab" periods we will find him outdoors drilling when weather permits. During the junior's winter months—at least for the majority of the NROTC Marines—there will be map reading, terrain appreciation, customs, courtesies and traditions, personnel administration, the rifle, carbine, BAR, pistol, BMG and the 60 and 81mm mortars. The senior will be taking up organization of the USMC, of the infantry battalion, of the battalion landing team, regimental combat team and the reinforced division, more work on the staff organizations, operation orders, landing diagrams, UP&T tables, etc.

We have spent a great deal of time outlining the vast field to be covered by our candidate. But we have said little about him as an individual, other than that he is—to all outward appearances—just another college man, different only in that he is preparing for a service career as an officer. Most of the Marine instructors have found that their Marine students, even though small in number, make themselves known in the NROTC unit and on the campus. Look into the average Marine NROTC student's file jacket and you will find that he is known on the campus through his club, fraternity, or other social organization, in student activities, or in intramural sports.

ALL OF THE ABOVE are visible demonstrations, but there are many intangibles that deserve mention. One of the most important is the demonstrable willingness to learn shown by most Marine students as soon as they report for their first Marine class after completing two years of naval instruction. I have been told by an educator who served in the Navy in the last war that this is true motivation, that the Marine candidate has made his selection because it represents what he wants to be — he has identified his goal, he wants to belong, to glory in the traditions and esprit de corps universally associated with the Marines. The fact that he comes willingly carries with it a challenge to the Marine officer instructor who must keep the fire burning, who must, at one and the same time, quench the prospective officer's thirst for knowledge and whet his appetite for more—if I may be permitted to mix metaphors.

The Marine NROTC student knows that after he graduates from college he will go to the Basic School at Quantico to undergo the same instruction and face the same problems as will the PLC, the OCC, the meritorious NCO and the Naval Academy graduate. He knows that when he goes out to his first duty station he will be prepared according to how well he has absorbed what has been taught him.

The NROTC Marine candidate, with his foundation in military lore and the confidence gained with that knowledge of his chosen profession, can be a great asset to the Marine Corps.

That is what the Marine "Rotsy" is like. But, you will never hear him refer to himself as a Rotsy student.

He will tell you in no uncertain terms that he is a Marine. USMC

BOOKS OF INTEREST TO OUR READERS

passing in review

Central Pacific War . . .

NEW GUINEA AND THE MARIANAS—Volume VIII of History of United States Naval Operations in World War II—Samuel Eliot Morison, 435 pages, illustrated. Boston: Atlantic-Little, Brown Co. $6.00

Admiral Morison gives us, in the eighth volume of his history of Naval operations in World War II, the full story of the epic Marianas campaign. It must be admitted that the ground combat phases are discussed in abbreviated form and that some minor errors do exist. However, there is sufficient information to give the feel of the fighting, and details are available elsewhere, particularly in the Marine Corps monographs.

It is in the naval phases at sea where the admiral places his details. The story of the "Turkey Shoot" is a vivid piece of work. Of particular interest is the excellent recital of Japanese movements as obtained from official documents and post-war interrogations. The maps and charts, showing in two colors the activities of U.S. and Japanese forces, lend considerable understanding to the narrative itself. To Admiral Morison's credit, it must be added that he gives praise, when due, not only to our forces, but also the enemy's, and is equally ready to mention shortcomings or errors.

In addition to this there is an account of submarine activities during the period. While of interest, this particular section suffers from a minor degree of monotony. The contribution of submarine operations was vital and certainly encompasses a field filled with incidents of highest courage. Yet the treatment given in this book is somewhat too long to summarize activities which could best be merely placed in a chart, and far too short to give a full picture of what the submariner faced and what he produced.

The stress is, of course, on the Marianas campaign. However, the first 146 pages of the volume deal with operations on or near New Guinea, as well as the aforementioned brief account of submarine patrols. General MacArthur's campaign brought the southwest Pacific forces to within 800 miles of the Southern Philippines. The Central Pacific front, however, was still only at Eniwetok, 1,000 miles east of Guam. A decision had to be made; push north from New Guinea or push west from the Marshalls. The Marianas campaign was the answer.

Few persons in a war ever see a directive. Yet these documents evolve the numerous orders which send men and ships to battle. Admiral Morison adds to his work an absorbing background which includes the conflicts, compromises and reasoning that went into the decisions of the Joint Chiefs. The result is a valuable contribution to American history.

Reviewed by LtCol V. J. Croizat

Afrika Korps . . .

THE ROMMEL PAPERS—Edited by B. H. Liddel Hart. 545 pages, illustrated. New York: Harcourt, Brace and Company. $6.00

This is one of the most important books about World War II yet to appear. It is certain to become indispensable for every student of things military. In addition, it is an exciting adventure story as well as the dismaying story of a man's personal dilemma.

It was Rommel's intention to publish a book on his campaigns when the war was over. With this in mind, he carefully recorded day-to-day events, impressions and military lessons. When Rommel failed to survive the war, B. H. Liddel Hart undertook to assemble and edit his papers. Most of the book is the writing of Rommel himself.

Interspersed through Rommel's work are passages contributed by Liddel Hart by way of amplification, correction of fact and facilitation of transition. Where large gaps in the chronology occur (because Rommel's notes were lost or purposely destroyed after his falling-out with Hitler), important complete sections are contributed by Manfred Rommel and General Bayerlein, Rommel's chief of staff. Also included are pertinent personal letters, mostly written by the general to Frau Rommel.

The book is rich in military lessons. Indeed, a series of maxims for soldiers could be compiled from it. Many of them could be pondered with profit by leaders concerned with the tactics and techniques of present and future American formations.

For the military man it has more than military lessons. It is a revealing picture of how the course of events forces a man, whose profession has been his whole life, out of his uncomplicated milieu into a savage jungle of political intrigue for which he is unprepared.

From Rommel's activities and plans for the repulse of an amphibious operation, Marines will be able to make intriguing inferences as to how he thought such an operation should be conducted. His views on the value of air support and naval gunfire are also thought-provoking.

The book leaves a reader with the impression that Rommel's successes were of his own making and his fail-

ures were the fault of others. I doubt that such a paragon existed in real life. One would not, of course, expect Rommel himself to point up his own shortcomings, if, indeed, he considered he had any. The editor of such a work might be expected, though, to be concerned about its over-all effect. The key to the mystery can be found in the index, where there are three references under the item "Liddel Hart, Capt. B. H., Rommel's tributes to." Apparently the esteem was mutual.

Reviewed by LtCol R. D. Kennedy

The 8th Army Rout . . .

THE RIVER AND THE GAUNTLET—S. L. A. Marshall. 372 pages. New York: William Morrow and Company. $5.00

Much publicity has been given the plight of X Corps and the final evacuation of Hungnam during the Chinese Communist drive in November 1950. But what of the 8th Army on the other side of Korea? In *The River and the Gauntlet*, S. L. A. Marshall tells us that story, a tragic tale of the defeat of a great modern American army by a peasant body composed, in the main, of illiterates. What actually happened during those tragic days: the personal horror, the military errors, the decisions—right and wrong—the heroic deeds, all are related just as they took place. There are no punches pulled.

General Marshall is well qualified to write this story. A veteran of two world wars, he was historian for the European Theater during World War II and was in Korea when the CCF attacked. He is now consultant to the Operations Research Office at Johns Hopkins, as well as military editor of the *Detroit News*.

The stage is the valley of the Chongchon River, a broad but shallow stream which flows through northwestern Korea to the Yellow Sea. The players are the men of Baker Co of the 8th Infantry Regiment, or perhaps those of the 1st Plt of C Co, or possibly just Pfc Lawrence E. Smith, Jr., leader of the second squad.

The actions of privates and generals, squads and companies are all described in great detail. They fit into the big picture and the final "bug-out" through the gauntlet, where in one day the 2d Infantry Division wasted away to nothing and entire units faded out under the terrible surge of Chinese humanity and overwhelming firepower.

The River and the Gauntlet is a slow starter, but if the reader will stick with it, he will find that in the final stretch the pace is terrific. It is a good book for all, whether in or out of uniform.

Reviewed by LtCol Joseph G. Fowler, USA

Carrier-based . . .

THE BRIDGES AT TOKO-RI—James A. Michener. 147 Pages. New York: Random House. $2.50

The Bridges at Toko-ri is a very short, dramatic novel with jet planes as the heroes. The planes are sent over Korea for one main assignment, to destroy the vital bridges of Toko-ri. Here, Communist supplies to the central and eastern front are assembled. Here, the Communists are vulnerable. Here, also, are the greatest concentrations of enemy antiaircraft guns in all of Korea.

The greatest part of the story is concerned with Harry Brubaker and

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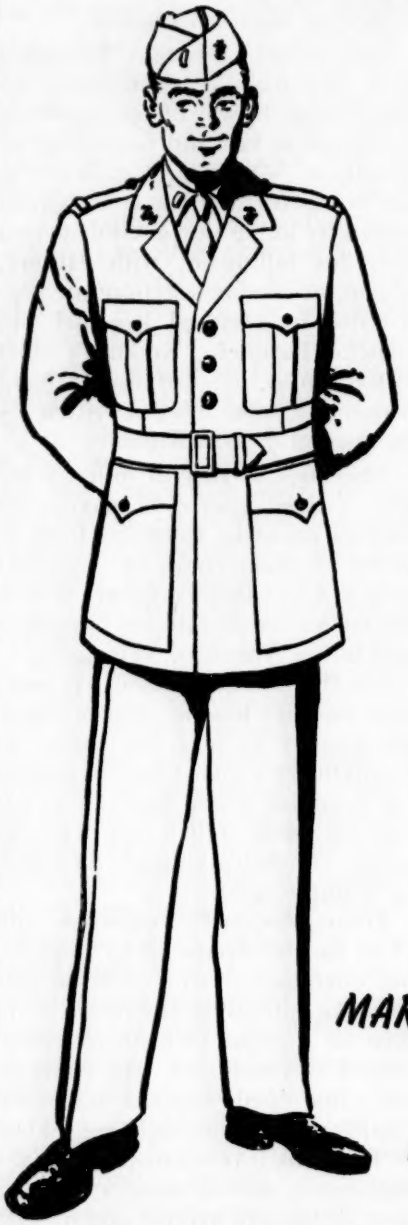

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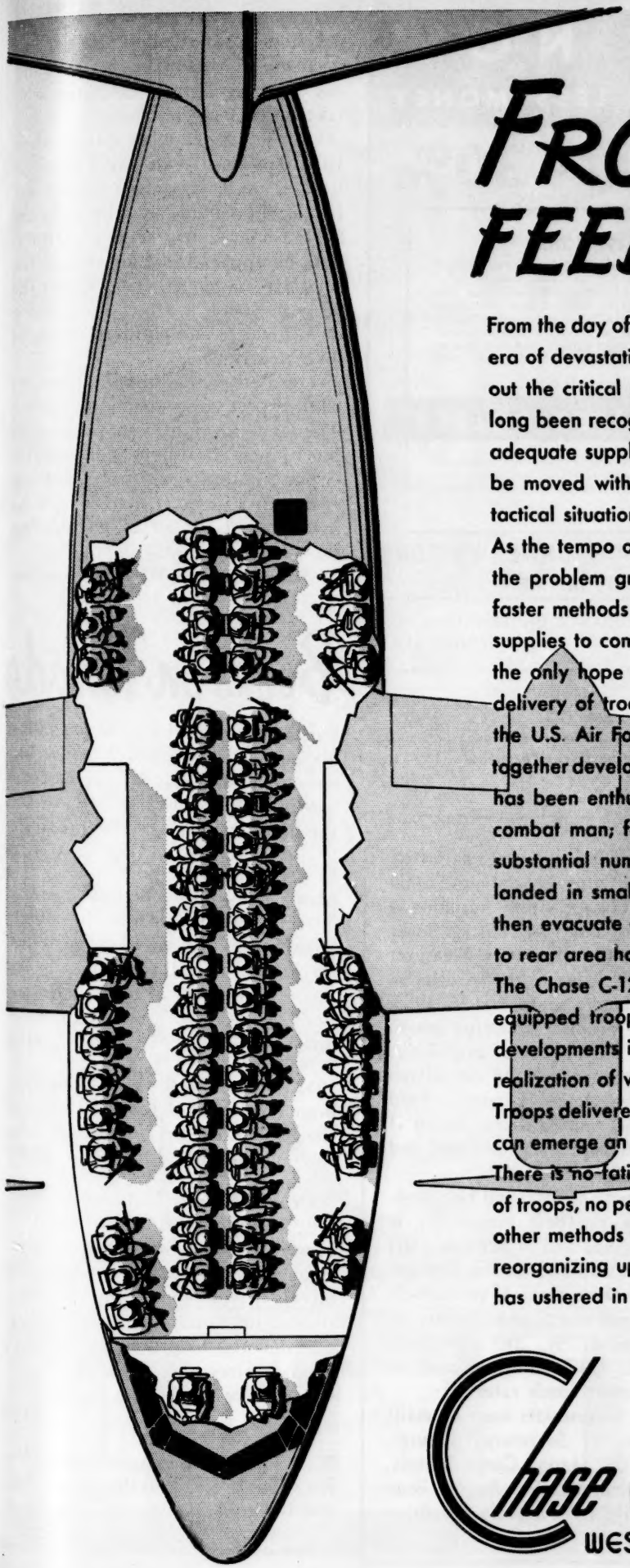

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As the tempo of warfare increased through the years, the problem grew more critical demanding newer and faster methods of delivering troops, weapons and supplies to combat areas. Firm in their belief that the only hope of solving this problem lay in the delivery of troops and equipment by air, the U.S. Air Force, Army and Chase Aircraft working together developed the assault transport. Its development has been enthusiastically received by the combat man; for today, fresh troops can be rushed in substantial numbers to forward combat areas and landed in small unimproved fields. The planes can then evacuate casualties direct from front lines to rear area hospitals.

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LAST CALL

There is still time to enter the Marine Corps Association's $2,000 Prize Essay Contest, but time is running out. All entries must reach the Secretary-Treasurer of the Marine Corps Association on or before September 30, 1953.

The articles submitted are to be on the subject of amphibious warfare and will be considered in three groups. Group I—Field Officers and Civilians; Group II—Company Grade Officers; and Group III—Enlisted.

A prize of $500 will be awarded for the best manuscript in each group and in addition $500 will be awarded for the best paper of these three. If your article does not win a prize it may be purchased by the MARINE CORPS GAZETTE and paid for at current space rates.

All manuscripts must be mailed to the Secretary-Treasurer, Box 105, Marine Corps Schools, Quantico, Va. See August issue or write for complete details.

his responses to the war. He does not like any part of it. He can see no reason for his being in Korea and has a bitter hatred for those who take no part in the effort.

Only in the last few pages, when Brubaker has flown his jet at the bridges of Toko-ri and enemy fire has hit his engine and he is forced to crash-land in enemy territory, does he appear to be an average fellow. His mind flashes back over the years he spent as a boy, his training days, his wife and children whom he loves dearly.

The book will disappoint readers who expect an outstanding novel. The general public may enjoy it, but to most aviators it will probably be just another war story. Mr. Michener will still be remembered more for *Tales of the South Pacific* than for *The Bridges at Toko-ri.*

Reviewed by Maj William D. Armstrong

Books on Parade

Battle Cry *Leon Uris.* Much talked about, best-selling novel of the Marines in World War II by a man who was one. Powerful, realistic, it is in the finest tradition of war literature. **$3.75**

Manta *Hans Nass.* Beneath the Red Sea, the author meets the *Manta birostris* and a hundred other strange sea creatures. He investigates the mysterious and intriguing formations of the world's warmest body of water. **$4.50**

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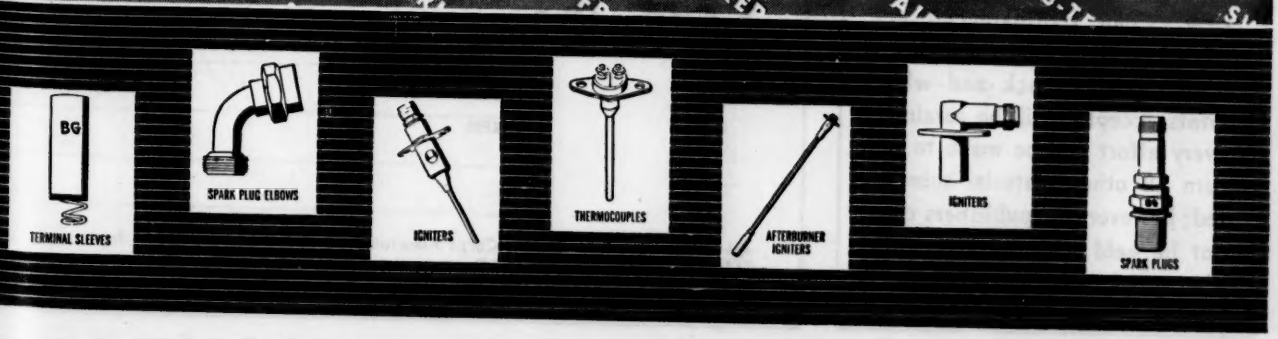

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The Marine Corps Association will pay $50 for color transparencies, and $25 for black-and-white photos suitable for use on the cover of the MARINE CORPS GAZETTE. Combat pictures of Marines in action are preferred, but good shots of training, maneuvers or anything featuring Marines or a Marine Corps subject (including still life) will be considered. Vertical composition is desired in all photos. Selection of pictures to be published will be made by the editors, and final acceptance will be made by the editors, and final acceptance will be dependent upon security review. Color transparencies accepted will be returned after publication. Black-and-white prints accepted will be retained. Every effort will be made to return all other material submitted; however, the publishers cannot be held responsible for any photographs lost or damaged.

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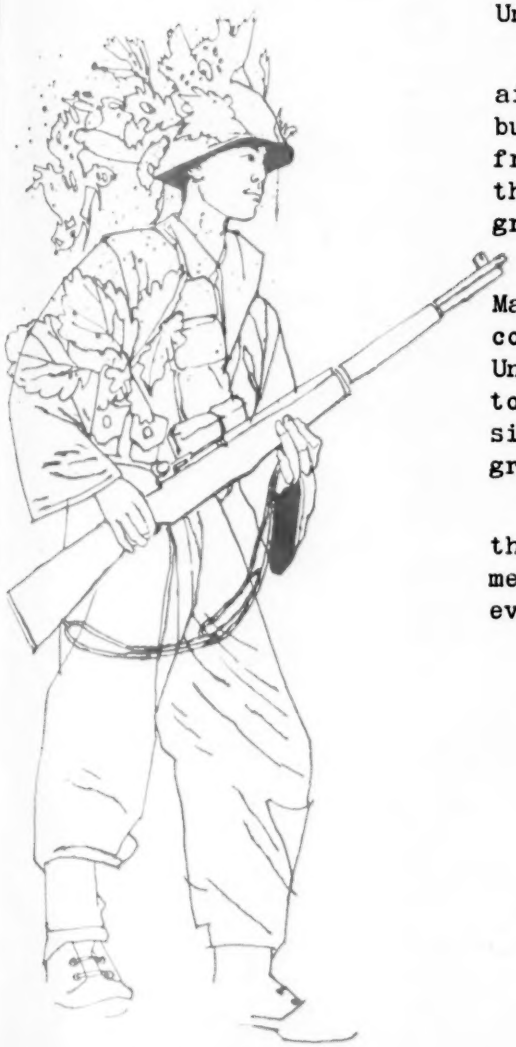
an expression of gratitude . . .

12 June 1953

Dear General Pollock:

When the officers and enlisted men of the 1st Korean Marine Corps Regimental Combat Team learned that the United States Marines were erecting a Memorial monument in honor of your brave heroes, they gathered a small amount of alms which were brought to me to offer to you. I am greatly pleased to have this opportunity of presenting these funds to you.

We Korean Marines owe much to the United States Marines. We are grateful for your valiant contribution to the liberation of our country from the aggressor both during World War II and the present conflict. We are proud of the fact that the Korean Marine Corps stands today as a crack fighting unit because of the training and advice received from the United States Marine Corps.



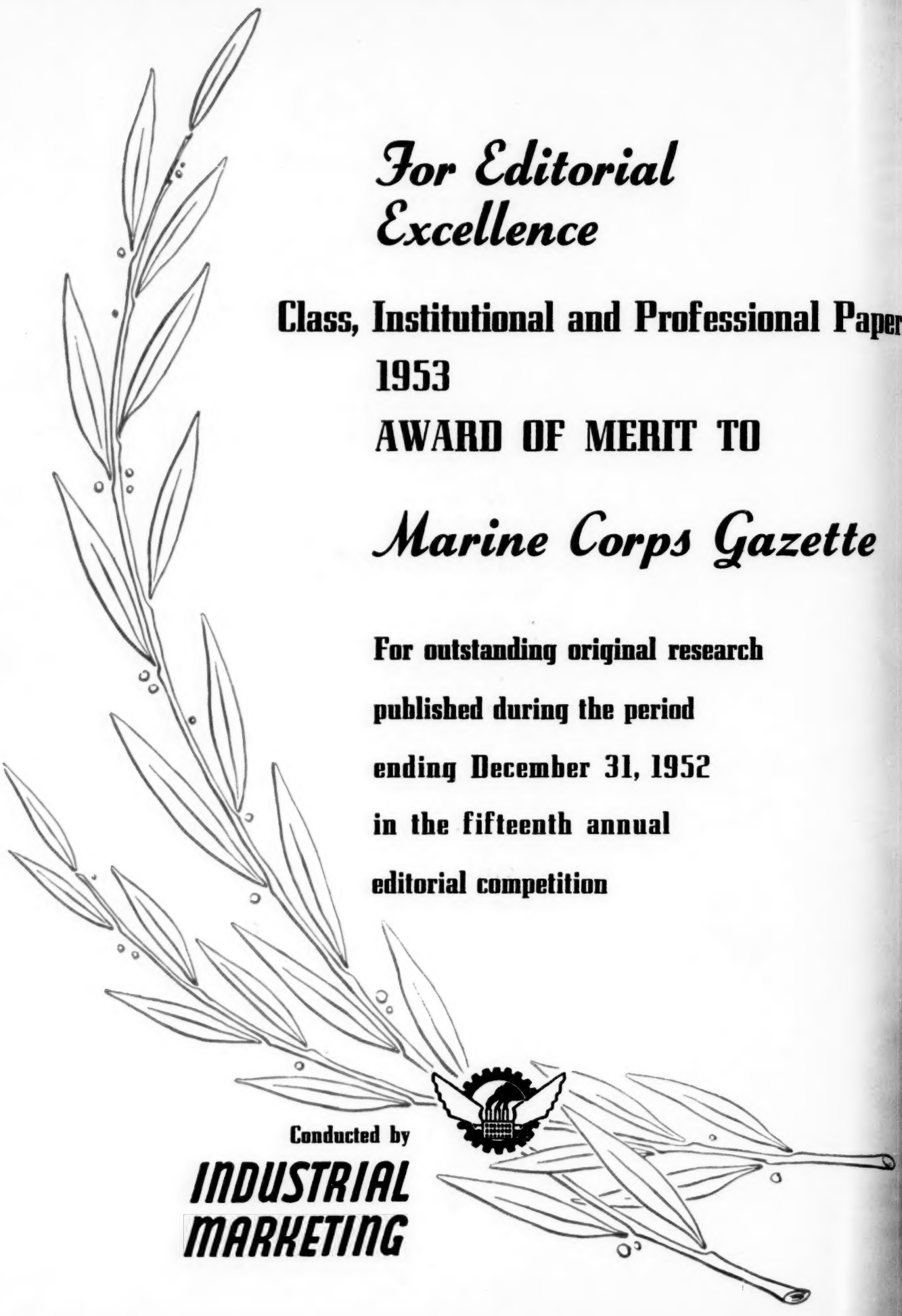
The blood shed by your men of valor has not only aided the Republic of Korea in its fight for freedom but has aided the cause of the United Nations and freedom-loving people everywhere. For this alone the world owes the United States Marines a debt of gratitude.

The small amount of money offered by the Korean Marines for your Memorial is certainly not enough to construct the monument. No amount could repay the United States Marine Corps for its brilliant service to our land. But with our contribution goes our sincere appreciation and humble respect for your great Corps.

When the Marine Corps Memorial has been erected, the Korean Marines will stand proudly and salute the memory of the valiant United States Marines of every age.

Respectfully yours,

/s/ KIM SUNG EUN
Colonel, KMC
Commanding



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